Perception and Its Objects, by Bill Brewer. Oxford: Oxford University Press, 2011. Pp. vii + 200.

1. Introduction

Brewer's compact and readable book is an important defence of what is sometimes called 'the relational view' or 'naïve realism' in the philosophy of perception. He begins with the following 'Inconsistent Triad':

- (I) Physical objects are mind-independent;
- (II) Physical objects are the direct objects of perception;
- (III) The direct objects of perception are mind-dependent. (p. 11)

(I) is the 'commonsense starting point...that the natures of such things as stones, tables, trees, and animals themselves are independent of the ways in which such physical objects do or may appear in anyone's experience of or thought about the world' (p. 2). (II) is a little trickier. Brewer thinks a slightly weaker thesis is obvious, namely that physical objects are *presented* to us in perception, which amounts to:

the utterly uncontested sense in which we *see* and otherwise consciously perceive physical objects: they are in this sense elements of perceptual consciousness. This claim that physical objects are presented to us in perception is intended as prior, and uncommitted, to any specific controversial theoretical elucidation of what such perceptual presentation consists in. (p. 2, emphasis in original)

Golf balls are physical objects. It is not contested that (say) Bill sees a golf ball—that golf balls are presented to us in perception. But that is not quite the same as saying that golf balls are among the direct objects of perception. What (II) adds to the mundane fact that Bill sees a golf ball is the claim that the golf ball provides 'the most fundamental characterization' of Bill's 'specific perceptual experience'; what it is for Bill to have this perceptual experience 'is canonically to be elucidated by citing, and/or describing' the golf ball. Brewer adopts the terminology of 'acquaintance' 'for the *relation* in which a person stands to the direct objects of her experience' (p. 3, emphasis in original).

Illusions raise an immediate worry about (II). Suppose Bill sees the golf ball, but due to the spectacular 'dynamic Ebbinghaus illusion' (Mruczek *et al.* 2015) it looks to be changing in size, getting larger and then smaller. Describing the object presented to Bill—an unchanging golf ball—does not seem to characterize Bill's experience particularly well.

We will return to this later; for now, let us finish the Inconsistent Triad. Why would one think that the direct objects of perception are mind-*depend-ent*? The illusion described above gives one reason: Bill is aware of a white sphere that is changing in size, but there is no mind-*in*dependent white sphere that is changing in size. That is not very convincing, because it is not clear why Bill isn't aware of an unchanging white sphere that merely *appears* to change size. However, as Brewer notes, cases of hallucination also provide an argument for (III), and the general consensus is that this sort of argument is much harder to resist.

Something has to go: Brewer argues that the culprit is (III). Locke and Berkeley, on the other hand, accept (III). Locke denies (II), instead taking 'ideas' to be the direct objects of perception. Berkeley denies (I), identifying physical objects with 'congeries of ideas' or, as Brewer puts it, 'mereological sums of mind-dependent direct objects of perception' (p. 19). (As Brewer mentions, Berkeley also has a phenomenalist strategy for denying (I).) Chapters 2 and 3 are valuable discussions of, respectively, Berkeley's and Locke's responses to the Inconsistent Triad.

Brewer takes 'the early modern empiricist insight' to be that there are 'direct objects' of perception: '[P]erceptual experience is most fundamentally to be construed in terms of a relation of acquaintance with certain... objects, whose identity and nature provide the most basic elucidation of what it is to be in the relevant conscious experiential condition' (p. 12). Where they went wrong is in taking direct objects to be mind-dependent. Berkeley was right in taking direct objects to be physical objects like golf balls; he was wrong in thinking that they were mind-dependent. (Incidentally, golf balls raise a question for Brewer's account of mind-dependence, since presumably the existence of golf balls requires the social practice of games of golf, which in turn requires thought about golf balls. But in any event, all Brewer needs is that nothing like Berkeley's metaphysics of golf balls is correct.)

Why does Brewer think the early moderns had an 'insight'? He gives one reason in this passage:

An account of the nature of our perceptual experience is an account of the ways things are for us visually speaking, that is, an account of the ways things *look*. The early modern empiricist insight, as I see it, is to take this way of putting the problem at face value in starting to give a solution. Very crudely, the ways things look are the ways *things* look. Very slightly less crudely, the ways things look to us in vision are the ways certain specific things look that are presented to us in vision, given the circumstances of their particular presentation. This provides the most fundamental characterization of the nature of the visual experience in question. So the intuitive starting point is to take seriously what might at first sight appear to be a dummy variable, 'things', in the question 'how do things look?'. (p. 4, emphasis in original)

But this seems to takes 'things' *too* seriously. In 'How do things look?' the word is not obviously referring to *things* (a plurality of objects). One can sensibly ask that question of someone whose glasses have misted up—reply: 'Things look foggy'. (Compare 'How are things?')

Another reason looks more promising:

In vision, there are certain specific *things* before us, and the way things are for us visually speaking is a matter of the way that those specific things *look*, given the relevant features of our particular perspective upon them. The most philosophically illuminating framework for understanding the nature of visual perceptual experience is therefore to regard this most fundamentally as a matter of our

acquaintance with certain specific direct objects whose nature in turn determines the way that things look to us given the relevant circumstances of our acquaintance with them. (p. 4, emphasis in original)

It is of course true that we see objects and that they look certain ways. However, it is dubious that all ordinary cases of vision involve objects (what about vision in thick fog?), and arguably objects are absent in cases of olfaction. Further, Brewer's opponents are sure to complain that he has ignored hallucination, which suggests the opposite conclusion, that perceptual experience is not fundamentally a matter of acquaintance with objects at least, not physical ones. Brewer does take up the problem of hallucination later (more on this at the end), but pending a solution to that he hasn't given much motivation for prioritizing objects.

More importantly, in the quoted passage the nature of the objects seems to take second place to the 'relevant features of our particular perspective upon them'. This is a departure from the early moderns and makes the term 'acquaintance' a bit misleading. For example, at one point Brewer describes the early modern approach as follows: 'The way things appear to subjects in perception is precisely a matter of the intrinsic natures of the relevant mind-dependent objects of acquaintance' (p. 24). There is no obvious sense to be made of a 'particular perspective' on an idea, in the early modern sense, a mind-dependent direct object. Either the idea is before the mind, in which case it always makes the same contribution to the nature of one's experience; or else it is not before the mind, in which case it makes no contribution at all. But once ideas are traded for physical objects, 'particular perspectives' become crucial. Even ignoring illusion, seeing the golf ball is compatible with having all sorts of perceptual experiences. For instance, changing the ball's distance from the perceiver changes how it looks.

Chapters 4 and 5 are the core of the book, so the rest of this review concentrates on those. But the subsequent two chapters also repay close study. Chapter 6 examines perceptual epistemology in the light of Brewer's relational account of perception. And the final chapter is a rich discussion of whether the mind-independence of our environment is somehow manifest in perception.

2. The Content View

As Brewer says, the near-orthodox way out of the Inconsistent Triad is to endorse the *Content View* (CV), on which 'perceptual experience is most fundamentally to be characterized by its *representational content*, roughly, by the way it represents things as being in the world around the perceiver' (p. 54, emphasis in original). (CV), as Brewer understands it, is incompatible with both (III) and (II) because it implies that 'there *are* no direct objects in the early modern sense' (p. 55). Perceptual experience, according to (CV), is a kind of propositional attitude, albeit one which seems to lack an English verb. If we appropriate 'experience' for this attitude, then (CV) in the visual case can be put as follows: when one sees, one experiences that p, where the proposition that p characterizes the ostensible scene before the eyes. Admittedly, one might want more explanation of the new-fangled terminology of 'experiencing', but that applies equally to Brewer's own jargon of 'acquaintance'.

(CV) seems to be very well equipped to give a satisfying account of illusions. The content of perceptual experience is supposed to correspond to the output of perceptual processing. In the case of vision, the content is (as vision scientists tend to put it) the visual system's 'best guess' as to the scene before the eyes. Naturally the process is far from infallible. When it goes wrong, or goes wrong sufficiently dramatically, an illusory experience results: the content of one's experience is false. A view like Brewer's does not seem to have the tools to explain perceptual error.

In chapter 4, Brewer argues, to the contrary, that (CV) has 'major difficulties in accounting for illusion' (p. 63); moreover, difficulties that motivate his own account. Brewer illustrates the first difficulty with the well-worn example of the Müller-Lyer (ML) illusion. Because of different arrowheads at the ends of two lines of equal length, one looks longer than the other. As Brewer says, '[T]he proponent of (CV) insists that we describe this as a case in which the lines are falsely *represented* in visual experience as being unequal in length: A is longer than B, say' (p. 65, emphasis in original). Brewer then writes:

My concerns about this account revolve around the question of how exactly the world must be for the (ML)-experience to be veridical. (CV)'s insistence on characterizing perception by its content requires a specific answer to this question. Yet it is far from clear how one is non-arbitrarily supposed to be given, or even what the parameters are for making progress towards such an answer. (p. 65)

So, for example, is the line with inward arrowheads 'supposed to be represented as shorter than it actually is...and by how much...' (p. 65)? Assuming that a line without arrowheads is represented as it actually is, these questions seem easy to answer. Look at two equal lines, one with inward arrowheads and one without. If the one with inward arrowheads looks shorter (it should), then shorten the line without arrowheads until the lines look equal. Simple methods like these are standardly employed in psychophysical studies of the illusion. Brewer's worry here seems readily assuaged.

Another more interesting objection concerns 'the possibility of falsehood':

...[I]f all that (CV) has to go on in accounting for the phenomenon of perceptual presentation is the representational content of the experience in question, then this central notion of perceptual content seems to come under serious tension from demands that pull in opposite directions. On the one hand, the phenomenology of genuine perceptual presentation surely places certain limits on the nature and extent of any errors involved. On the other hand, the basic notion of false content,

which is crucial to the (CV) account of illusion, appears subject to far less demanding, if any, such limits. (p. 71)

What's the (CV) account of *seeing o*? 'The basic proposal...is that a physical object *o* is presented in a perceptual experience just if its content concerns *o*' (where 'concerning *o*' may be spelt out in a variety of ways) (p. 72). And 'according to (CV), a visual illusion is a perceptual experience with a content that concerns *o*, and represents it as *F* although it is not in fact *F*' (p. 73). The problem is supposed to be that there are limits on the nature and extent of any errors involved in illusion. For example, 'although a rabbit curled up on the chair next to me may look like a cat or a cushion, that very animal could not normally look like the Eiffel Tower' (p. 73). The challenge to (CV) is to account for these limits, given that they are not obviously entailed by the structure of the position so far.

Is it really so clear that 'genuine perceptual presentation is incompatible with extreme error' (p. 73)? A rabbit might look like a duck, after all. And one can see Bill's blue house far away, even if it looks like a white dot and (due to a strategically placed mirror) does not even appear to be where it actually is. More importantly, if there are limits to error, the natural place to find them is in the architecture of the visual system: perhaps the way the visual system keeps track of objects requires that it gets certain of their features right. A related point is obviously correct for contents as a whole. Formally, (CV) is compatible with any content whatsoever—say, that this rabbit is made of molecules—being the content of perceptual experience. The content view itself has no explanation at all for why the content of experience could not be that this rabbit is made of molecules, but that is no strike against it.

Brewer raises other interesting problems, one about 'impossible perceptual contents' (p. p. 68) and another about (CV)'s commitment to the 'generality of predication' (section 4.3)—roughly, that numerically distinct objects can all be perceptually represented as *F*. These will be passed over for reasons of space.

3. The Object View

Chapter 5 offers a defence of Brewer's Object View (OV), and grapples with the problem mentioned earlier. If the 'identity and nature' of the objects of perception 'serve to elucidate what it is to be in that very conscious experiential condition' (p. 95), how can these objects be golf balls and tomatoes? Merely to say that Bill sees a white golf ball is to say very little about his experiential condition, because white golf balls can be visually presented in numerous different ways, depending on the perceiver, the lighting conditions, and so on.

Brewer's solution is this:

The key to my reply on behalf of (OV) is that perceptual experience is a matter of a person's conscious acquaintance with various mind-independent physical objects [a] *from a given spatiotemporal point of view*, [b] *in a particular sense modality, and*

[c] in certain specific circumstances of perception (such as lighting conditions in the case of vision). These factors effectively conjoin to constitute a third relatum of the relation of conscious acquaintance that holds between perceivers and the mind-independent physical direct objects of their perceptual experience. (p. 96; square bracket labelling added, emphasis in original)

'Three extra relata' would be more accurate than 'a third relatum'. Here are some humdrum cases, illustrating the need for [a], [b], and [c]. Bill and I perceive a white golf ball:

- (a) Bill sees its dimpled texture, but I don't (because I'm too far away);
- (b) Bill sees its shape, but I feel it;
- (c) Bill sees its colour, but I don't (due to peculiar lighting conditions).

But perceptual experience depends on many other factors, not clearly subsumed under [a] or [b] or [c]: the overall composition of the scene, the distance between the perceiver's eyes, the direction of gaze and attention, the state of adaptation, the specific details about the sense modality (for instance, trichromatic or dichromatic colour vision), and so on. Brewer's 'third relatum' seems to be a catch-all for whatever other conditions make a difference to perceptual experience, leaving only a small residue to be accounted for by the 'identity and nature' of the perceived object.

The 'third relatum' might make Brewer's 'Object View' somewhat misleadingly named, but that does not stop it from being a genuine rival to the Content View. The issue can be framed around an object o's looking F to some subject S, where Fness is a paradigmatic sensible property, for instance a colour, shape, or texture. (Cases of 'looking expensive', for example, can be ignored; for some reservations about using 'looks' to characterize illusion, see fn. 10, p. 8.) A proponent of (CV) will say that the content of S's experience is (or includes) that o is F—o is represented as F. A proponent of (OV) will say that content and representation are superfluous: o looks F 'in virtue of the fact that S is consciously visually acquainted with o' from a certain point of view and in certain specific circumstances (p. 118).

Everything turns on whether (OV) really does render content and representation superfluous. Here is Brewer's official account of 'looking F:

o looks F iff o is the direct object of a visual experience from a point of view and in circumstances relative to which o has visually relevant similarities with paradigm exemplars of F. (p. 121)

This uses two pieces of terminology that need explaining: 'paradigm exemplars' and 'visually relevant similarities'. First, what are 'paradigm exemplars' of *F*ness?

[V]ery roughly, they are instances of [*Fness*], whose association with the terms for those kinds partially constitutes our understanding of those terms, given our training in the acquisition of the relevant concepts. They are paradigm exemplars of the kinds in question relative to our grasp of the concepts for those kinds. (p. 104)

A paradigmatic *F*-thing is (roughly) something that could be used to acquire the concept of *F*ness, and/or something to which someone possessing the concept would 'properly deploy' it, an appropriate 'exemplar to use in manifesting or acquiring the concept' (p. 107).

Visually relevant similarities are 'similarities by the lights of visual processing of various kinds', for instance similarities in:

the way in which light is reflected and transmitted from the objects in question, and the way in which stimuli are handled by the visual system, given its evolutionary history and our shared training during development. (p. 103)

Sometimes the visually relevant similarities are purely optical, as in the bentlooking straight stick in water:

[I]t looks bent in virtue of its visually relevant similarities with an unsubmerged bent stick...Given the way that the liquid actually refracts light from the submerged portion of the stick seen, the visually relevantly similar stick described is a paradigm bent stick. Thus, the partially submerged stick *looks bent*. This is a direct result of the (OV) characterization of experience as conscious acquaintance with the relevant mind-independent physical object—the half-submerged straight stick. along with its visually relevant similarities with a paradigm bent stick. (p. 106, emphasis in original)

This example brings out that a 'paradigm exemplar' of Fness is not simply an object—rather, it is an object relative to a certain condition. An ordinary straight pencil is not without qualification a paradigm exemplar of straightness. Out of water it is, but partially submerged in water it isn't. Paradigm *case* is thus better than paradigm *exemplar*, and indeed Brewer uses the former locution at one point.

More interesting illusions are where the similarities are not purely optical, as in the Müller-Lyer illusion and the (static or dynamic) Ebbinghaus illusion. In the static Ebbinghaus illusion, two circles of the same size are surrounded by, respectively, larger or smaller circles, changing the apparent relative size of the surrounded circles. Unlike the straight stick in water, the stimuli (in particular, the two surrounded circles) do not have the same effect on visual receptors as two circles of unequal size. The explanation is postreceptoral—that is, involving how 'stimuli are handled by the visual system' and not completely understood. There is variation between indi-viduals, and even evidence of a small sex difference, with women being more susceptible to the illusion than men (Phillips *et al.* 2004). The 'visually rele-vant similarities' can only be specified as the characteristic effects on a par-ticular subject's visual system produced by a paradigm case of two unequal circles of such and such sizes. We can now expand Brewer's account of 'looking F', making the relation to the subject explicit:

o looks F to S iff S sees o and o has the effects on S's visual system that are characteristic of a paradigm case of Fness.

A paradigm case of Fness is a situation in which (i) an object o is F and (ii) o is in a certain condition. The condition is supposed to ensure that o is an appropriate 'exemplar to use in manifesting or acquiring the concept' of Fness. It will do that just in case o (in that condition) looks F (to S). The problem is that Brewer has not explained how to discharge 'looks F', and this is no oversight. An F-object may not look F because of some unknown difference in post-receptoral processing. The only way of ruling out this situation as a paradigm case of Fness is by appeal to the fact that o does not look F. And once we've done that, o's actually being F seems redundant. In other words, Brewer's account boils down to this:

o looks F to S iff S sees o and o has the effects on S's visual system that are characteristic of an object's looking F.

We need not pause to examine how this is to be interpreted, exactly. The important point is that even if true, this does nothing to explain how o can look F to S without the proposition that o is F being (part of) the content of S's perceptual experience. Brewer's account of looking F promised to be a rival to the content view, but it isn't. (For further helpful discussion of these issues, including revisions to Brewer's account, see Brewer (2018), Brewer *et al.* (2018), Brewer (2019), Block (2019), Brewer (forthcoming-a), Brewer (forthcoming-b).)

Finally, what about hallucination? Here Brewer borrows from Martin (2004):

...[H]allucinatory experiences have to be characterized by giving a qualitative description of a more or less specific mind-independent scene, and saying that the subject is having an experience that is not distinguishable by introspection alone from one in which the constituents of such a scene are the direct objects. No more positive characterization of the experience may be given. (p. 109)

As Brewer notes, Martin's account of hallucination is not without its problems, and Brewer makes some contributions to its defence. Adapting the account to illusions introduces no additional difficulties, and indeed Brewer himself is inclined to favour Martin's account for 'the supposed general yellowing of the jaundiced person's perception' (p. 116). (Yellowing of vision, or xanthopsia, sometimes accompanies jaundice, but can be caused by a number of other conditions.) Why didn't Brewer adopt Martin's account

across the board? Although *Perception and Its Objects* does not address that question, it does succeed in shedding light on many others. The book belongs on the essential reading list of contemporary philosophy of perception.*

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Thinking Off Your Feet: How Empirical Psychology Vindicates Armchair Philosophy, by Michael Strevens. Cambridge, MA: Harvard University Press, 2019. Pp. xii + 345.

Is armchair knowledge possible, and if so, how and of what? Insightful, reflective, and wide-ranging, Thinking off your Feet: How Empirical Psychology



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