Book Review

Knowing By Perceiving, by Alan Millar. Oxford: Oxford University Press, 2019. Pp. xiii + 222.

Millar has written a valuable monograph on perceptual knowledge. *Knowing By Perceiving* is careful and detailed, at times laborious, delivering many insights. Occasionally S sees an F, and there's a bit of Ψ ing and Φ ing, but many of the examples have a pleasantly bucolic feel: wheelbarrows full of soil, evening sunlight on a hillside, mushrooms on rotting logs, frost on the grass, and 'an island where there are sheep that make a distinctive bleating sound' (p. 161; all page references are to this book).

As Millar remarks in the Preface, perceptual knowledge is a 'paradigm of knowledge' (p. vii). Knowledge of the past, the future, and the occluded parts of the present all require perceptual knowledge of one's surroundings. He embraces the 'knowledge first' programme, a departure from his earlier view in *Reasons and Experience* (Millar 1991). He notes that 'there has been a degree of bafflement at the idea that there could be an illuminating and satisfying account of knowledge' which was not 'belief that satisfies certain conditions' (pp. 3-4); part of his project is to give such an account.

What is perceptual knowledge? Millar first glosses it as 'knowledge gained from what you perceive by means of one or other of the senses of sight, touch, hearing, smell, and taste' (p. 4). This is a little too narrow, because knowledge gained from (for example) proprioception is also perceptual knowledge. The initial gloss is also too broad, because the operative conception of perceptual knowledge throughout most of the book is what Millar later calls 'simple perceptual knowledge' (p. 164), which is a kind of recognitional knowledge. In the case of vision, perceptual knowledge is 'knowledge that something is some way from the way it looks'; in the case of touch, 'knowledge that something is some way from the way it feels' (p. 5). Testimonial knowledge and what Millar calls 'knowledge from perceived indicators' (p. 5), for instance knowledge that the postman has delivered the mail by seeing letters on the doormat, are 'gained from what you perceive'. Nonetheless, they do not fall under Millar's operative conception of perceptual knowledge.

One of Millar's targets is the popular view that perceptual experiences, conceived as 'internal' to the agent, 'justify' perceptual beliefs:

A widely held view is that on perceiving my keys I have a certain sort of experience—an experience such that it is just as if I am looking at my keys. Crucially, though, having such an experience is conceived to fall short of seeing my keys. To perceive the keys further conditions must be satisfied, including the condition that the presence of the keys causes me to have the experience. As I shall argue later, it is not obvious that experiences so conceived justify or contribute to the justification of beliefs. (p. 6)

Such remarks will be endorsed by a relationalist about perceptual experience, someone who thinks that 'the sensory experiences that are implicated in episodes of perceiving mind-independent objects...[consist] in awareness of (acquaintance with) mind-independent objects' (p. x). Perceptual experiences, on this 'disjunctivist' view, are not common elements between cases of perception and matching cases of hallucination. Millar acknowledges the influence of 'disjunctivists about epistemological issues, notably...John McDowell' (p. x), but rejects relationalism.

Chapter 2 defends the view that 'knowledge is explanatorily prior to justified belief' (p. 23). Millar works with 'the reasons-conception of justified belief', on which 'to be justified in believing something...amounts to having an adequate reason to believe it and believing it for that reason' (p. 24). (He concedes, given the slipperiness of 'justified belief', that this is somewhat stipulative.) Reasons to think something true are 'normative reasons', which are 'constituted by truths or facts' (p. 24). Millar's talk of 'constitution' can perhaps be dispensed with, since his examples of normative reasons simply *are* truths or facts.

Although the idea that normative reasons are facts is well-motivated, some of the details of Millar's account are less compelling. He says that the 'claim that X believes that P for the reason that Q entails both that the reason in question is a normative reason to believe that P and that it is true that Q' (p. 28), but X may believe, say, that the coin will land heads for the reason that it landed tails on the last five flips. It is true that it landed tails five times but that does not 'favour or count towards' (p. 24) its being true that the coin will land heads. The first part of the alleged entailment doesn't seem right.

As to the second part, Millar says in a footnote that 'people can believe for reasons that are constituted by propositions that are false' (p. 24, fn. 1); such reasons are 'motivating reasons' (p. 24). But this appears to conflict with the (very plausible) second part of the alleged entailment: 'X believes that P for the reason that Q' entails 'Q'. It would have been clearer to say that people can believe for *apparent* or *supposed* reasons. To avoid the entailment, Millar adopts the locution 'X believed that P because, *as he supposed*, Q' (p. 28), but that seems basically the same as saying that X believed that P because of the supposed reason that Q. There is no need to divide reasons into the true ones and the false ones: they are all true, but people can take something to be a reason when it isn't. (These points, I should say, are peripheral to Millar's central project.)

When is the fact that *Q* a reason *for X* to believe other things? If *X*'s belief that *Q* is a lucky guess, then *X* cannot use the fact that *Q* as a premise to gain

knowledge or justified belief. Millar argues (plausibly) that *X* needs to know that *Q*, in order for the fact that *Q* to be available to *X* as a reason. This is looking very much like Williamson's conception of evidence (Williamson 2000, ch. 9). According to Williamson, one's evidence is one's knowledge. According to Millar—and setting aside 'false' reasons—one's reasons comprise one's knowledge.

In chapter 3, Millar defends both Direct Realism and 'a non-relationalist account of experience', on which perceptual experiences are 'episodes that are metaphysically (constitutively) distinct from the presence then and there of anything in one's environment' (p. 30). Direct Realism is the view that, for example, we can see a goldfinch 'not by means of seeing [or otherwise being aware of] something else that is distinct and separate from it' (p. 43). As Millar notes, Direct Realism is 'widely taken to be true'; nonetheless, he gives Hume and Moore a good run for their money.

Non-relationalism is the negation of relationalism, which Millar explains as follows:

[T]he experiences implicated by perception of mind-independent things...are essentially relational, being episodes of awareness of (acquaintance with) such things...It is crucial for the relationalist position that episodes of being visually aware of, or acquainted with, a mind-independent thing, do not decompose into the having of an experience that is not essentially relational plus the satisfaction of further conditions. (p. 49)

The perceptual experience one has on seeing a goldfinch, according to the relationalist, essentially involves the goldfinch itself. A qualitatively identical experience induced by taking hallucinogens (assuming this is possible) would presumably not require awareness of any physical object, and so would be quite different in kind from the goldfinch experience. The non-relationalist, by contrast, thinks that the two experiences are of the very same kind. In Millar's terminology, both experiences are 'sensory', but only the goldfinch experience is 'perceptual'. As he puts it: 'Because experiences under the non-relationalist conception are not essentially related to the presence of mind-independent objects, being perceptual is not an intrinsic feature of an experience, but depends on a contingent relation between the experience and the presence of the things perceived' (p. 51).

The 'most persuasive line of thought' for non-relationalism 'turns on consideration of the causes of sensory experiences' (pp. 51-2). In particular:

It is plausible that while for the most part our sensory experiences result from the impact upon us of things in our surroundings, it is a merely contingent fact concerning any experience that it has the causes that it has. It is possible that you should have, for instance, a tactual experience such that it is just as if you feel something tickling the back of your neck, though the experience is induced by some subcutaneous event. Granted that feeling something touching you is not the same as it being merely as if you feel something touching you, the question is

whether this difference should be taken to entail a difference in the character of the experience gained. At the root of the non-relationalist's position, I take it, is the conviction that the fact that one episode is perceptual and the other not is no reason to suppose that the experiences involved must differ qua experiences. (p. 52)

Suppose that Hamish sees a goldfinch—call her Gia—and let e_G be Hamish's corresponding perceptual experience, caused (in part) by Gia. According to the relationalist, e_G constitutively involves Gia, which entails (at least) that e_G could not have occurred without Gia existing. One version of Millar's worry can be put as follows: since Gia *causes* e_G , and effects can occur without their actual causes, e_G can occur without Gia, contradicting the claim of constitution.

However, this is not very convincing. Consider a kissing of Hamish by Gordon. We may suppose that this kiss constitutively and essentially involves Gordon (and Hamish). Yet Gordon started it: he caused the kiss to occur. In fact, the kiss could not possibly have occurred without Gordon causing it. Of course, the mere presence of Gordon does not guarantee that the kiss will occur: Gordon has to do something. But the same point holds for seeing Gia. The mere presence of Gia does not guarantee that e_G will occur. Gia has to do something, at least in the broad sense in which being suitably situated with respect to Hamish counts as doing something.

A deeper issue concerns sensory experiences themselves, which according to Millar are 'particular episodes in the mental lives of individuals', which 'extend over time and can vary in character over time, as when looking at a changing scene or changing one's position in relation to something at which one is looking' (p. 50). Are there such episodes? Evidently perception reveals environmental episodes, as when one sees Gia fly off a branch. And, on the mental side of the ledger, one is in the state of seeing Gia fly off. But the alleged mental episode is less obvious. As Millar remarks, 'the very idea of experience is contested' (p. 97); he also concedes that 'the experience itself is not something of which I am conscious in a perceptual or quasi-perceptual way' (p. 101). Still, Millar takes the existence of 'sensory experiences' as beyond dispute; arguably, he should not have (Byrne 2009).

Looking at a bush 'in early spring, I think that *this* bush still has dead heads of flowers on it' (p. 55, emphasis in original). On Millar's view, the bush has caused me to undergo a perceptual experience that is not 'essentially related to mind-independent objects'. It is then something of a puzzle that I am in a position to think about this particular bush. How do nonrelationalists account for the fact that perception allows us to think about particular objects, such as the bush? Millar faces up to the challenge, attempting 'to sketch a promising account of how the non-relationalist should conceive of the connection between perception and demonstrative thought' (p. 61). Central to this account is the notion of being 'experientially orientated' towards an object, which in the case of vision amounts to the object producing: (1) a course of visual experience that in large measure *matches* ways the object and its situation visually appear, and

(2) potentialities for activity, and in some cases actual activity, directed at *coping* with the object's presence.

Furthermore,

(3) the induced potentialities for activity, and any actual activity that is evoked, (substantially) *reflect* the course of experience that is produced. (p. 57, emphasis in original)

It is, Millar says, 'constitutive' of seeing an object that one is 'experientially oriented towards it' (p. 60). The picture is supposed to at least demystify how the non-relationalist can accommodate demonstrative thought.

(1) helps with the problem of explaining how perception enables the thought that the F is green, where 'the F' is a description that picks out *this bush*. However, (1) does not explain how perception enables the thought that *this* (the bush) is green. The problem is that (2) and (3) do not move us any closer to demonstrative thought. Take (2), for example: descriptive thoughts about an object will allow me to 'cope with its presence', in Millar's sense. According to Millar, if these three conditions obtain with respect to the bush, that guarantees that I can think demonstrative thoughts about it. But here there seems to be a gap which Millar has not bridged.

Fortunately, for those unpersuaded by Millar's non-relationalism, the core of the book, in chapters 4 and 5, can be detached from it. There Millar gives an account of perceptual knowledge in terms of abilities.

As noted at the start, perceptual knowledge for Millar is recognitional: one knows 'of the thing one perceives that it is of some kind or has some property or is some specified individual or feature' (p. 78). Perceptual recognition, he says:

is a phenomenologically immediate reaction to the perception of something. For instance, your recognizing a person as your colleague NN is phenomenologically immediate in that it would simply strike you that she is NN. It is not constitutive of such recognition that you judge that she is NN on the basis of an assumption as to how she looks. With the usual conceptual resources you would take in, at the level of belief, something of how NN appears, but your recognition is cued by her appearance, not by your believing something as to her appearance. (p. 79)

The key claim is in this passage:

Perceptual recognition of a thing as being some way is achieved, not by doing something else, but simply by exercising a suitable general perceptual-recognitional ability, that is, an ability to recognize things that are that way as being that way from some way that they appear. (p. 83)

What about the possibility of ringers, say bars of soap crafted to have the look of lemons? If I perceptually recognize a lemon to be one, don't I also

need to know that fake lemons are not in the vicinity? After all, that this object has the lemony look is not good evidence by itself that it is a lemon: fake lemons share that appearance too. Millar convincingly bats away this worry. He doesn't quite put it this way, but his point is essentially that perceptual recognition cannot always rely on background knowledge, for instance that one is not in fake-lemon country, because that requires perceptual recognition too. If scepticism is to be avoided, we have to grant that sometimes epistemic burdens must be offloaded to the environment. In a 'favourable environment', where only lemons have that distinctive appearance, one may come to know that these objects are lemons, 'going by the way they look' (p. 87); that the environment is favourable is an enabling condition of knowledge, not something that itself needs to be known.

Another worry is that recognitional abilities and recognizing are too intimately related for the former to explain the latter. Surely if I recognize that this is a robin by seeing it, then I am able to recognize that this is a robin by seeing it, and I have exercised that ability. Conversely, if I exercise my ability to recognize a robin by sight then I will recognize a robin by sight. (In an instructive discussion of abilities in chapter 6, Millar argues that one exercises an ability to ϕ only if one ϕ s.) If recognizing a robin by sight is equivalent to exercising the ability to recognize robins then one might worry that Millar has not made much explanatory progress.

And Millar thinks that there is an equivalence. Early on in the book he claims that it is 'constitutive of such visual-recognitional knowledge that it is acquired in exercising a visual-recognitional ability' (p. 4). Suppose that, as a novice birdwatcher, I am able to recognize a robin only if the bird is presented in the most stereotypical manner; recognition would fail with the slightest adjustment in the bird's orientation or posture. I have a 'general ability' to recognize robins by sight, according to Millar. Naturally my ability pales in comparison to the abilities of expert ornithologists, whose abilities can be exercised in a much wider range of circumstances, but it is an ability to recognize robins nonetheless.

Here is Millar replying to the charge that his account is 'uninformative':

The explication is an explication of one thing—as it might be, what it is for a subject to know from its look that the bird before her is a robin—in terms of something else—a general ability to tell of robins that they are robins from the way they look. In adverting to the ability we are not invoking something, we know not what, that produces knowledge, we know not how. For the ability is individuated in terms of the implicated type of content, a sense-modality, and an appearance of some corresponding sort (a look, sound, feel, etc.). We know perfectly well what it is to have abilities of this sort and we know how to test whether people have them. (p. 91)

That seems fair; still, one might wonder how much illumination this throws on perceptual knowledge. Take an example of an ability Millar mentions in chapter 6, the ability to land a passenger aircraft safely. Commercial airline pilots have this ability, which 'takes a lot of skill born of rigorous training' (p. 132). In the course of training, a pilot might safely land an aircraft before he or she has acquired the ability: often, acquiring the ability to ϕ comes from practising ϕ ing, sometimes failing but sometimes succeeding. If we want to devise effective training programmes for pilots, so they may acquire the ability to land safely, we need to know what is required to land safely in the first place. That does not preclude explaining why a pilot landed safely by citing her ability to land safely, but that is because there is no equivalence between landing safely and exercising the ability to land safely: a pilot might land safely by a fluke. However, on Millar's view this is disanalogous to the perceptual case, where the parallel equivalence does hold.

Now Millar does have some helpful remarks about recognizing a robin: it involves (roughly) judging that the bird is a robin from the way it looks, in a favourable environment in which fake robins are absent. As Millar points out, this is not sufficient for recognition:

An apprentice horticulturalist who has not quite got the hang of recognizing various flowers from their visual appearance as being of this or that species or variety might correctly judge a flower to be a rose, but could just as well have judged a peony to be a rose. (p. 79)

Millar's diagnosis of the apprentice's lack of knowledge is that his 'judgement is not an act of recognition because it does not consist in the exercise of a general ability to recognize roses as roses from the way they look' (p. 79). But there is an alternative diagnosis that allows some separation between perceptual recognition and the exercise of a general recognitional ability. What the apprentice lacks is a general ability to *judge correctly* that objects are roses from the way they look. He lacks this ability because he could easily have (falsely) judged a peony to be a rose. (See Williamson 2000, ch. 5 on knowledge and 'safety from error'.) This is an attractive account of perceptual knowledge which is much like Millar's, but which dispenses with the equivalence between recognitional knowledge and recognitional abilities.

A separate point is that Millar's account focuses on recognizing things with distinctive visual appearances like robins and lemons, which allow the possibility of ringers. Robins have a robinesque-gestalt of visual features. Fake robins have that look too. In an unfavourable environment infested with fake robins one cannot know that this robinesque bird is a robin, even if it is the genuine article. Although Millar denies that one needs to know that the bird is robinesque in order to recognize it from the way it looks, he does not deny that one can also recognize that it is robinesque. How does one do that?

As Millar says, one can recognize that an object has a variety of 'superficial features', like colour, shape, and texture, and the distinctive combination of these shared by robins and fake robins: 'One can visually recognize televisions as being televisions', but also 'visually recognize red things to be red things' (p. 83). On Millar's account, visually recognizing that a scarlet object is scarlet involves judging that the object is scarlet from the way it looks—namely, *scarlet*. There is no *other* visible property of the object that enables one to recognize that it is a particular determinate shade of red; this makes recognizing scarlet objects unlike recognizing robins or lemons. We may grant that in some thin sense, when one recognizes an object as scarlet, one is exercising an ability 'to recognize things that are that way as being that way from some way that they appear' (p. 83). The worry is not that this is wrong, but that it doesn't tell us much.

Chapter 5 is devoted to undermining:

the *experientialist approach to perceptual justification*, [that] sensory experiences justify or contribute to the justification of belief. The view is not that facts or considerations about experiences can play a justificatory role, but that experiences themselves can have this role. This is a position that takes us well beyond the near truism that perception can yield justified belief. (p. 97, emphasis in original)

One way experiences could contribute to the justification of belief is if perceptual evidence ultimately consisted in facts about experiences. Another perhaps less intelligible—way is if experiences simply *are* pieces of evidence. As Millar points out, some philosophers swiftly move from the near-truism that perception enables us to gain evidence about our environment to the quite different thesis that 'among the evidence we routinely gain through conscious awareness is evidence comprising our own experiences' (p. 101).

Chapters 6 and 7 will be of great value to any philosopher interested in abilities, and in particular abilities as they figure in virtue epistemology. Chapter 8 turns to 'knowledge from a perceived indicator', for instance 'knowing that deer have recently passed along a path from the perceived presence of certain markings on the path' (p. 165). As mentioned, Millar defends the view that in knowing that this is a robin from the way it looks, one does not need to know a general premise to the effect that only robins around these parts have that look. In the case of knowledge from perceived indicators, the need for a general premise can seem more compelling. According to 'the covering generalization model':

the presence of the markings on the path can serve as evidence on account of which we can have knowledge, or at least a justified belief, that deer have recently passed by only if we may infer from a statement of that evidence, together with a suitable covering generalization, that deer have passed by. (p. 168)

Millar would grant that *sometimes* one knows that deer have passed by on the basis of these markings because one also knows a suitable generalization. One could learn from a book that only deer produce these markings in this area of the country, for example, and then deploy this knowledge when one sees markings like these for the first time to conclude that deer passed by. If the book turned out to be a work of fiction that only accidentally reproduced an accurate claim about deer tracks, one would not know the generalization and

neither would one know that deer passed by. Thus on this occasion knowledge of the generalization is no mere accompaniment: without it, one does not know that deer passed by. The same kind of example can be contrived for recognizing that this is a robin from the way it looks.

Still, as Millar points out, a more realistic candidate for such a known generalization is that 'markings like those on the path are highly likely to have been produced by deer passing by' (p. 171), from which one would not know by deduction that deer have passed by, only that it is highly likely that they have. As he plausibly argues, knowledge of generalizations generally comes second in the order of acquisition: the ability to know by perception comes first, with knowledge of a generalization being 'an adjunct to possession of the recognitional ability, rather than a prerequisite of having the ability' (p. 170).

The ninth and final chapter takes up some themes in contemporary epistemology, for instance the idea (elaborated by Barry Stroud) that a philosophical understanding of knowledge should '[hold] in abeyance the very knowledge for which we are trying to account' (p. 191), and the closely related idea that radical scepticism demands an answer on the sceptic's own terms. In a helpful discussion, Millar takes Stroud's concerns seriously. However, since Millar, like Mole in *The Wind in the Willows*, is evidently a grounded animal, linked 'to the frequented pasture, the lane of evening lingerings, the cultivated garden-plot', it is no surprise that he concludes that this approach to epistemology is a 'philosophically induced affectation' (p. 207).

Knowing By Perceiving leaves some important questions about knowing by perceiving unanswered. On the other hand, the book gives provocative and (often) convincing answers to some others. It is a fine achievement.*

References

Byrne, A. 2009. Experience and content. *Philosophical Quarterly* 59: 429–51.
Millar, A. 1991. *Reasons and Experience*. Oxford: Oxford University Press.
Williamson, T. 2000. *Knowledge and Its Limits*. Oxford: Oxford University Press.

Department of Linguistics and Philosophy, Massachusetts Institute of Technology, USA abyrne@mit.edu doi: 10.1093/mind/fzab065

ALEX BYRNE

 * Thanks to E.J. Green, and especially to Alan Millar for correspondence and extensive comments on a draft of this review.