

Locke on Sense Perception  
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ABSTRACT

Much recent philosophy of perception is preoccupied with finding a place for phenomenal character in a physical world. By contrast, Locke's philosophy of sensory perception is an episode in his 'Historical, plain method' and seeks to map out the processes by which we experience ordinary objects. On Locke's account, our ideas of primary and secondary qualities enter the mind 'simple and unmixed'; having an idea of a colour, for example, is not necessary for the visual experience of a shape. An analysis of the Molyneux problem reveals that, for Locke, judgment corrects the initial two-dimensional idea vision presents us with. Nevertheless, Locke's position is problematic: he has no account of how we pair ideas of primary and secondary qualities, nor of how we could experience a colorless visual idea of shape.

Biographical note

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0. Introduction

Much of what currently goes under the name of 'philosophy of perception' is concerned with the phenomenal character of experience, that is, 'what it's like' to have an experience (see e.g. Fish 2010, 2). The worry that has spawned the most familiar -isms of today's landscape is where to place phenomenal character: is it somehow intrinsic to an experience (adverbialism), or is it inherited from the objects of experience (intentionalism and naïve realism, in their very different ways). The debate over phenomenal character is a legacy of the twentieth-century project of naturalizing the mind.

Locke shares none of these notions or concerns, and we must not allow them to infect our reading of the text. As a particularly stark illustration, consider his inverted spectrum case:

Neither would it carry any Imputation of *Falshood* to our simple *Ideas*, if by the different Structure of our Organs, it were so ordered, That *the same Object should produce in several Men's Minds different Ideas* at the same time; .v.g. if the *Idea*, that a *Violet* produced in one Man's Mind by his Eyes, were the same that a *Marigold* produced in another Man's, and *vice versâ*. For since this could never be known: because one Man's Mind could not pass into another Man's Body, to perceive, what Appearances were produced by those organs; neither the *Ideas* hereby, nor the Names, would be at all confounded, or any *Falshood* be in either. (2.32.15)

Locke's point is that our epistemic practices would be unthreatened by such an inversion. But now consider the same case in contemporary hands. Right at the start of *The Conscious Mind*, David Chalmers uses it to single out 'the specific *character* of experiences.'

[W]hy is seeing red *like this*, rather than like *that*? It seems conceivable that when looking at red things, such as roses, one might have had the sort of color experiences that one in fact has when looking at blue things. Why is the experience one way rather than the other? Why, for that matter, do we experience the reddish sensation we do, rather than some entirely different kind of sensation, like the sound of a trumpet? (1996, 5)

If physicalism were true, the inverted spectrum scenario should be impossible; but it is conceivable, and hence possible; so physicalism is false. It should be obvious that Chalmers's concern is miles away from Locke's.<sup>1</sup> Nowhere in the *Essay* does Locke show any interest in reducing mental states to physical states, or indeed, except in the single case of God, in proving that the mind is or is not material, a point 'put out of the reach of our Knowledge' (4.3.6). What is more important, Locke is not interested in 'what it's like' to see red. He's interested in how the red that we do see fits within a world we know to be denuded of such qualities. Locke's emphasis is on what an experience is *of*, not its phenomenal character.<sup>2</sup>

What, then, *does* animate the discussion of sense perception in Book II of the *Essay*? It is clearly an episode within Locke's larger project of using his 'Historical, plain method to give [an] Account of the Ways, whereby our Understandings come to attain those Notions of Things we have' (1.1.2). The chief aim is to catalog and describe the means by which we generate or receive our picture of the world.<sup>3</sup> Most of what Locke tells us about sensory perception in particular would fall under the third branch of knowledge he outlines at the very end of the *Essay*, the 'Doctrine of Signs' (4.21.4). Since physical objects are not 'present to the Understanding,' the mind needs 'a Sign or Representation of the thing it considers' (ibid.)

Deciphering these texts requires solving a wide variety of problems: what is the ontological status of ideas? In what sense do they function as intermediaries? Other chapters in this volume take up these and related issues. I shall assume that Locke is a straightforward indirect realist, that is, someone who thinks that ideas are the immediate objects of perception and that it is through these ideas that our minds reach out to the world. That leaves plenty of room for puzzlement. In what follows, I re-construct Locke's account of the simplest perceptual process. To fix our ideas, let us take a single case. Jane is standing in a forest near a waterfall. Somehow, her ideas make the forest and waterfall present to her. Our task is to solve for 'somehow.'

### 1. Sensory representation

If we want to know how Jane's ideas reveal her environment to her, we need to begin with the more general question, how do ideas represent their objects? There are three candidates in the literature for Lockean representation: a causal/teleosemantic connection, a semiotic connection, and resemblance. Only the last two of these have a basis in the text, on my view. Let us begin with the causal theory.

Locke says that all simple ideas are adequate, true, and real (2.30-32). They are adequate in that they 'perfectly represent those Archetypes, which the Mind supposes them taken from'

(2.31.1). In the case of sensory ideas, this just means that they have the right etiology, any ‘Sensation answering the Power’ that acts on our senses (2.31.2). The same point is made again when Locke says that all simple ideas are true; they are ‘suitable to those Powers’ God has placed in objects (2.32.14).<sup>4</sup>

To call a simple idea ‘real’ is to say that it ‘agree[s] to the reality of things’ (2.30.2). Locke quickly moves to block the implication that all simple ideas therefore resemble their objects: ‘[n]ot that they are all of them the Images, or Representations of what does exist, the contrary whereof, in all but the primary Qualities of Bodies, hath been already shewed’ (2.30.2). This text is worth lingering on: Locke explicitly says that only ideas of primary qualities represent their objects, because only they *resemble* their objects. The purely causal connection that makes ideas of secondary qualities real and adequate does not thereby make them representations.

For some readers of Locke (including my (2004) self), 20.30-2 claims that simple ideas represent their objects simply by being caused in the right way, or having been intended by God to have been caused in the right way. Locke would then have anticipated one episode in the twentieth century project of naturalizing intentionality. Such a reading, however, has a hard time making sense of the rest of Locke’s view. To give just one example: if what a simple idea represents is what caused it, there is no reason to think that the subject will generally, or perhaps even can, know what her own ideas represent. For there is nothing intrinsic to the idea itself to give us a clue. Much else about Locke’s view would go sideways. For example, the processes of combining our simple ideas into complex ideas of substances would then be impossible, since there would be nothing epistemically available to the subject to guide her in such a process. Moreover, a causal reading makes Locke’s account of knowledge unintelligible: Locke defines knowledge as the perception of the agreement or disagreement of ideas (4.1.2). But on the causal reading, there can be no such ‘perception’: on the causal story, introspecting your ideas tells you nothing at all about what they represent, and surely whether they agree or disagree is a function of what they represent. (For the full argument, see my 2012).

A better reading takes the reality, adequacy, and truth of simple ideas to consist in their epistemic role: they serve as indicators of things or powers. After all, the question Locke is dealing with in 2.30-32 is primarily epistemic, not representational: in what sense are our ideas a reliable guide to the external world? When Locke says that simple ideas are real, he explains himself in terms of ‘Marks’ or signs (2.30.2). Just as words serve as indications of the mental states of the speaker (3.1.2), so simple ideas can serve as signs or indications of their causes. Note that this semiotic function is filled only by simple ideas as they occur in sensory experience: a remembered idea ‘answers’ to nothing, or at best to the power of the mind that produced it.<sup>5</sup>

Sensory ideas ‘perfectly represent’ their archetypes, then, only in the sense that they indicate their presence. If Locke is not to contradict himself, he must distinguish between two senses of represent, for we’ve just seen him affirm and deny that all simple ideas are representations. In what we might call the ‘loose sense,’ to represent is just to draw the mind’s attention to something: anything at all, whether an idea or not, can be said to be a representation in this sense (3.4.6; 3.4.12; 3.6.29).

When Locke denies that all simple ideas are representations, he must be working with a stricter sense of the term. In this sense, a representation is something through which the mind thinks to an ultimate object. It is through Jane’s idea of the waterfall that her mind is ultimately in contact with the waterfall itself. Strict-sense representation must be resemblance; recall that Locke’s

reason for denying ideas of secondary qualities the status of strict-sense representations is their failure to resemble anything. Other texts can be adduced where Locke equates representation with resemblance (e.g., 2.24.1).

The upshot is that ideas of secondary qualities occurring in sensory experience can serve as signs, and hence as representations in the loose sense, although they fail to resemble their objects and so are not representations in the strict sense. Simple ideas of primary qualities, by contrast, are representations in both senses: they serve both as indications (loose sense) when they occur in sensation and as pictures or images (strict sense) regardless of their origin. In what follows, I'll use 'representation' only in the strict sense.<sup>6</sup>

Someone might well wonder how simple ideas of secondary qualities can serve as signs if they fail to resemble. How can a simple idea of violet, say, indicate the presence of something with the relevant power, when by itself it provides no means of representing that object or power? Locke's answer is that the indicative role of ideas of secondary qualities is parasitic on the representational role of ideas of primary qualities. Someone with an inverted spectrum is still seeing all the same shapes and indeed all the same macro-level primary qualities as the rest of us. Even if the top light on a stoplight looks bright yellow to her, she is still seeing that top light as the top light, and when it is illuminated, she knows to stop. That wouldn't be possible, of course, unless she had some means, totally independent of the colour experience, of picturing the stoplight.<sup>7</sup> In other words, signification presupposes, and so cannot be, representation: if x is to serve as a sign of y, one must already be able to (strictly) represent y by independent means.

And with this we've reached our central problem for Locke's theory of sense perception: if ideas of secondary qualities are merely signs and not representations, how can Jane see her forest and waterfall? As we'll find George Berkeley urging below, doesn't the experience of primary qualities positively require ideas of secondary qualities to play a representational role? True, they must play the epistemic role of indicators; but mustn't they also serve as genuine representations?

Before searching for answers, we must have more of Locke's view on the table. He begins with a fairly simple picture of perception (II.i-8), which he then complicates, by adding the faculty of judgment. Whether any of this solves or exacerbates these problems remains to be seen.

## 2. The simple picture

At first sight, the prospects for a Lockean theory of sensory perception are dim. He tells us that '*What Perception is, every one will know better by reflecting on what he does himself, when he sees, hears, feels, etc., or thinks, than by any discourse of mine. Whoever reflects on what passes in his own Mind, cannot miss it: And if he does not reflect, all the Words in the World, cannot make him have any notion of it*' (2.9.2). There are two reasons to be more hopeful. First, Locke claims that '*in bare naked Perception, the Mind is, for the most part, only passive*' (2.9.1). As we'll see when we reach Locke's more complicated picture, this qualification is an important one, and Locke does think the mind takes an active role in some kinds of visual perception. Describing such operations would clearly form part of a theory of sense perception.

Second and more important, even if the thing itself doesn't admit of definition or explanation in other terms, Locke's description of it must fit within his general ontological and psychological framework. It is this framework that forms the scaffolding of what I'm calling his simple picture. And it is to this framework that we now turn.

Before the moderns came along and ejected colours and the rest from the mind-independent world, there was a fairly straightforward account of perception. It was of course hugely complicated in its details, but the basic outline within which most theories were developed is not hard to grasp, and it can be traced directly back to Aristotle.

For Aristotle and his inheritors, each sense has a proper object: light and colour for sight, sound for hearing, and so on. Some objects are improper, in the sense that they are not the proprietary object of any one sense. These 'common sensibles' are 'movement, rest, number, figure, [and] magnitude' (*de anima* 418a17, in Aristotle 1984, p.644). If one is thinking of the proper sensibles, especially colour, as just as mind-independent as shape, there is no special problem in seeing how perception of the proper sensibles might at the same time be perception of the common ones. It is not as if one happens to see both colour and shape at the same time, as one might happen to see both a rhinoceros and a tapir; seeing shape just is seeing the coloured shape.

In Locke's hands, the common/proper distinction closely maps the primary/secondary quality distinction. The simple ideas that come to us from 'divers Senses' (2.5) include number, extension, figure, rest, and motion; the primary qualities include number, extension, figure, and motion (2.8.9). The one exception is solidity, a primary quality detectable only by touch.

Despite his continuity with Aristotelian tradition in this respect, he departs from it in another. For Locke insists that ideas of all qualities 'enter by the Senses simple and unmixed' (2.1.1). The idea of gray is numerically distinct from the idea of the shape of the moon, even if the two come into the mind at the same time. No idea of a secondary quality is necessary for having the idea of a primary quality (even if, as we'll soon see, the idea of a colour presupposes the idea of extension or space). Since the question of what counts as simplicity for Locke is a vexed one, we should examine the passage in full:

Though the Qualities that affect our Senses, are, in the things themselves, so united and blended, that there is no separation, no distance between them; yet 'tis plain, the *Ideas* they produce in the Mind, enter by the Senses simple and unmixed. For though the Sight and Touch often take in from the same Object, at the same time, different *Ideas*; as a Man sees at once Motion and Colour; the Hand feels Softness and Warmth in the same piece of Wax: Yet the simple *Ideas* thus united in the same Subject, are as perfectly distinct, as those that come in by different Senses. {...} [A simple idea] being in it self uncompounded, contains in it nothing but *one uniform Appearance*, or Conception in the mind, and is not distinguishable into different *Ideas*. (2.1.1).

In line with other commentators (such as Matthew Stuart 2010), I take simplicity to be a matter of uniformity of appearance to the mind. The 'different' ideas of the last line above is qualitative, not numeric, difference. A Lockean simple idea need not be a mental atom, or Berkeleyan minimum visible. In this sense of 'simplicity,' a simple idea must not be decomposable into further ideas of a different type. Mental atoms would trivially count as 'simple' in this sense, but so would the ideas of space and duration (2.25.9), which (at least typically) can be broken down into smaller units of the same kind.

Although no idea of a secondary quality is necessary for the perception or thought of primary qualities, the converse does not seem to be true. In the course of arguing against Descartes's identification of body with extension, Locke claims that the idea of a colour cannot exist (whether in sense experience or imagination) without the idea of extension or space:

For I appeal to every Man's own Thoughts, whether the *Idea* of Space be not as distinct from that of Solidity, as it is from the *Idea* of Scarlet-Colour? 'Tis true, Solidity cannot exist without Extension; neither can Scarlet-Colour exist without Extension; but this hinders not, but that they are distinct *Ideas*. Many *Ideas* require others as necessary to their Existence or Conception, which yet are very distinct *Ideas*. (2.13.11; cp. 4.3.12 and 4.3.14)

Colour and extension, then, stand in a one-way necessary connexion: any idea of a determinate colour will necessarily be accompanied by an idea of an extension. As Locke insists, this does not make the idea of the colour *into* the idea of the extension: they remain distinct, even if necessarily co-existing in the mind. It is vital to see that Locke does not think the co-existence holds the other way around: nowhere, as far as I can tell, does he say or imply that the idea of a body or of extension is necessarily accompanied by an idea of a colour. Nor could he, on pain of depriving himself of the ability to think of a world that lacks colours, tastes, and the rest.

Consider Jane's idea of the pine tree in front of her. Locke is insisting that each *kind* of idea – shape, colour, size, motion or rest – is intromitted separately. The idea of the shape of the pine tree can be decomposed into other ideas (of smaller regions of that shape, for example), but those ideas are nevertheless homogeneous. Jane then assembles her different idea-types into a single complex idea. That idea is complex precisely because it can be broken down into shape-ideas, colour-ideas, and so on.

If we look beyond the *Essay*, we can find a text that seems to contradict all this. The *Elements of Philosophy* declares that '[b]esides colour, we are supposed to see figure; but in truth, that which we perceive when we see figure, as perceivable by sight, is nothing but the termination of colour' (1823, III: 325). J.R. Milton (2012) has put the authorship of this text into doubt, so we cannot take it as authoritative. Even if we could, it would still be at odds with Locke's view in the *Essay*. There, he claims that sight is the most 'Comprehensive' of the senses because it brings to us not only the ideas of light and colour, its proper objects, but also the 'far different' ideas of space, figure, and motion (2.9.9). In short, for Locke, seeing the color of the tree and seeing its shape really is like seeing a rhinoceros and a tapir.

### 3. The role of judgment

Locke doesn't rest long with the simple picture. For in 2.9 he introduces the operation of judgment, which, in adults, 'alters' our visual ideas without our noticing it.<sup>8</sup> Locke illustrates this process by imagining a globe of a single, uniform colour. What it 'imprints on the mind' is simply

the *Idea* of a flat Circle variously shadow'd, with several degrees of Light and Brightness coming to our eyes. But we having been accustomed to perceive, what

kind of appearance convex Bodies are wont to make in us; what alterations are made in the reflections of Light, by the difference of the sensible Figures of Bodies, the Judgment presently, by an habitual custom, alters the Appearances into their Causes: So that from that, which truly is variety of shadow or colour, collecting the Figure, it makes it pass for a mark of Figure, and an uniform Colour; when the *Idea* we receive from thence, is only a Plain variously colour'd, as is evident in Painting (2.9.8)

We begin with the idea of a flat circle with an array of colors caused by the shadows and source of the light. But adults, at least, don't stop there: we replace this initial, two-dimensional idea of a circle characterized by variegated colours with an altogether different one, that of a sphere that is uniformly colored.

Locke's use of the term 'mark' here is an important clue, for he also claims that words are marks or signs of ideas in the mind of the speaker (3.2.1). The process of judgment is not a conscious, rational inference, anymore than the process of understanding an English word is a matter of inference for a native speaker. It is custom that endows us with the power of judgment, and replaces one idea with another, just as a competent English speaker moves instantly and without inference from the sound 'elephant' to the idea of the thing. As Shelley Weinberg has argued (2016, 130), this reading of judgment is confirmed in Locke's *Of the Conduct of the Understanding*. There, Locke tells us how to break the habit of associating ideas that 'have no natural cohesion': we 'must nicely observe the quick and almost imperceptible motions of the mind in its habitual actions. What I have said in another place about the change of ideas of sense into those of judgment may be proof of this' (1996, 219).

The operation of judgment seems peculiar to vision; this is why Locke says at the start of 2.9 that bare naked perception is for the most part passive. Later in that chapter, he explains:

Because Sight, the most comprehensive of all our Senses, conveying to our Minds the *Ideas* of Light and Colours, which are peculiar only to that Sense; and also the far different *Ideas* of Space, Figure, and Motion, the several varieties whereof change the appearance of its proper Object, *viz.*, Light and Colours, we bring ourselves by use, to judge of the one by the other. (2.9.9)

Custom causes us to correct our initial visual ideas on the basis of light and color. Nothing analogous holds for touch or the other senses.

If this is the right reading, it enables us to understand a passage Locke later adds to the chapter: the famous dispute over the man born blind and suddenly made to see. Locke's friend 'Mr. *Molineux*' asked whether such a man could by sight distinguish a cube from a sphere, when he'd previously had only tactile experience of both (2.9.8).<sup>9</sup> Locke agrees with Molyneux himself: the newly-sighted man 'at first sight, would not be able with certainty to say, which was the globe, which the cube, whilst he only saw them...' (2.9.8)

Much ink has rightly been spilt over Locke's response (Bolton 1994, Berchielli 2002, Bruno and Mandelbaum 2010). For if he stuck with the simple picture outlined above, he would not be entitled to his answer. Berkeley takes aim at precisely this point: how could Molyneux man be unable to make the identification, if 'a visible and tangible square differ only *in numero*' (*New*

*Theory of Vision*, in Berkeley 1949-58, vol.1, 133)? The idea of shape intromitted by visual and haptic experience is, after all, supposed to be one and the same (2.5). When Molyneux man receives the idea of the sphere through vision, what's to stop him recognizing it as precisely the same (or at least same *kind*) of idea as he was used to receiving from haptic experience?

If I'm right about the opening of the chapter, however, we have a clear answer. What Molyneux man is missing is the association of haptic and visual experience that makes Lockean judgment possible. He's stuck with his initial visual idea and has not had the experience of how spherical or cubical objects affect our sight (2.9.8). So he cannot correct for the distortions in that initial idea: the sphere will appear to him as a variously shaded disk.

On my reading, then, vision does succeed in providing us ideas of shape. It's just that these ideas need to be modified by judgment. That we see things as three-dimensional objects at all is a kind of cognitive achievement, even if it's won by custom and not inference or Cartesian 'natural geometry.'

Before moving on, we should note that there is an epistemic price to be paid by any reading of Locke on the role of custom or judgment. Locke's insistence that judgment is replacing an initial visual idea of the primary qualities of an object with another such idea retains the simplicity of these ideas. In neither case is there any heterogeneous element that would violate the uniformity of appearance criterion of simplicity. But I find it hard to see how the simple idea supplied by judgment can enjoy the same epistemic status as a passively received simple idea. Simple ideas summoned from the memory and substituted by habit in perception are not (at least at the time of their occurrence) directly caused by objects outside of us. As we saw above, only those ideas that are the immediate result of the powers of bodies operating on our senses can be guaranteed to be true, real, and adequate. I think this is Locke's problem, not one a commentator can solve.

#### 4. Problems

Although I believe we have arrived at a coherent and consistent reading of the text, that hardly means it is free of philosophical problems. In fact, I think Locke's 'pulverisation of the given,' in Geneviève Brykman's (1991) apt phrase, creates a host of fascinating problems, not unlike those faced by his Cartesian counterparts. I begin with a problem that I believe so far has gone unnoticed before turning to Berkeley's attack. We might call it the 'matching' problem.

Although Locke complicates his simple picture, he never backs off from its key claims: the ideas of distinct qualities enter the mind 'simple and unmixed,' and as a result, no idea of a primary quality can at the same time be an idea of a secondary one (even if, as we saw with 2.13.11, some ideas of secondary qualities are necessarily accompanied by ideas of primary qualities). And yet the mind puts together some of these and not others to achieve the idea of a single object. When she attends to the pine tree, Jane collects some of the ideas striking her senses (the brown of the bark, the conical shape) and not others (the mossy colour of the boulder in front of her, the sound of splashing water nearby). The question is, on what basis does she do this? I am not assuming that this is a voluntary or conscious activity on Jane's part. It is nevertheless an activity, on Locke's view, and we are owed some account of how she does it.

This problem of matching ideas of secondary qualities with those of primary ones to achieve an experience of a complete object is just one path into a central issue Berkeley was to raise: what we might call the individuation problem. Berkeley's attack on Locke's treatment of

ideas of secondary qualities is presented as the consequence of his attack on abstract ideas in the Introduction to the *Principles*. The argument against abstract ideas is complex, but happily for us, the relevant part of that argument is a simple appeal to introspection. When he comes to discuss the primary/secondary distinction in the body of the *Principles*, Berkeley writes,

...I desire anyone to reflect and try, whether he can by any abstraction of thought, conceive the extension and motion of a body, without all other sensible qualities. For my own part, I see evidently that it is not in my power to frame an idea of a body and extended and moved, but I must withal give it some colour or other sensible quality which is acknowledged to exist only in the mind. (*Principles* Part I, section 10 in Berkeley 1975, p.80).

Although Berkeley frames his discussion in terms of abstraction, it is important to see that he is not just critiquing a putative process of forming ideas. If he were, his argument would be toothless against Locke. For Locke, there is no need for a mental process to come along after the initial receipt of ideas and carve ideas of primary qualities off from those of secondary qualities. They all enter the mind simple and unmixed in any case: no abstraction need apply.

Berkeley's real point, I suggest, is that visual perception requires colours to present shapes and movement. In this, as in so many other things, Berkeley is following Nicolas Malebranche, who writes,

...it is obvious that one sees bodies only by color and that one can only distinguish them as different by the difference of their colors. No proof is necessary for this claim, save for a little reflection on the effects of colors in painting (1958-84, vol.17-1, p.281).

Locke's simple picture insists that ideas of secondary qualities are not necessary for having ideas of primary qualities. And he must retain this feature of the simple picture on pain of sawing off the branch he sits on: if we are able even to think of the physical world as it is in itself, we must be able to conceive a world of primary qualities alone. Berkeley, following Malebranche, thinks this is obviously a non-starter: a visual experience (sensory or imaginary) of primary qualities alone would not be a *visual* experience at all.

Some commentators on Locke's response to Molyneux suggest that, for Locke, the ideas of primary qualities we deploy in vision are really given only in tactile experience. Custom associates these haptic ideas with visual ideas of secondary qualities. If Locke held that view, he could perhaps escape the individuation problem. For now it is haptic experience that presents individuated objects and, one might claim, there is no secondary quality that stands to touch as colour stands to vision.

The first problem with such a reading is the lengths to which it must go to accommodate *Essay* 2.5, where Locke claims that ideas of primary qualities are given in multiple senses. Some creative interpreters might suggest that he means merely that ideas of such qualities *figure in* the activity of multiple senses. I don't myself find that plausible. Second, it suggests a view of visual perception even more bizarre than the simple picture I've outlined. On this view, we would all be like super-blindsighters, lacking a proprietary visual phenomenology of shape and the rest and

recruiting ideas given by touch to fill the gap. Nor would it help with the matching problem: we are still faced with the task of connecting Jane's experience of gray with the idea of the shape of the boulder.

Can the sophisticated picture of 2.9 help solve these problems? I don't think so. Recall that the sophistication consists in the claim that judgment or custom, in subjects suitably experienced, replaces an initial complex idea (of a flat circle variously shaded) with another complex idea (of a sphere uniformly colored). The operation of judgment occurs only *after* ideas of secondary qualities have been combined with those of primary qualities to form the idea of a single object, and how that combination is achieved is precisely what the matching problem calls into question. Repeated experience cannot help, as far as I can see: Jane needs some initial experience of the color of the tree as being in the same place outside of her as its shape, not merely intromitted at the same time. By the same token, the operation of judgment has to begin with the complex idea of a single object, already individuated in thought from the other objects around it. So nothing judgment does can solve these problems. My reluctant conclusion is that Locke didn't see either of these problems at all. That they seem obvious to us is no reason to think they should or would seem obvious to Locke.

## 5. Conclusion

None of this means that Locke's mistakes are simple mis-steps. They are the inevitable result of keeping the doctrine of common sensibles while relegating ideas of secondary qualities to the status of what Michael Ayers (1991) aptly calls 'blank effects.' Locke often compares ideas of such qualities to pain, to show they need not resemble anything in the mind-independent world. But then he owes us an account of how they come to seem as if they are located in precise regions of space and attached to precisely the primary qualities, and hence individual objects, they are.

Locke is hardly alone in this predicament. Indeed, all the moderns who endorse the Galilean austerity program face their own versions of these problems. Malebranche himself, perhaps the philosopher prior to Berkeley who most clearly insists on the role of colour and other qualities in perception, resorts to increasingly strange measures to get ideas and sensations to walk in lock-step. It is no accident that Berkeley, who takes Malebranche as much as Locke as his starting point, ends where he does: with a thorough-going rejection of matter.<sup>10</sup>

## FURTHER READING

Perhaps the best recent treatment of Locke's views on perception is Michael Jacovides (2017); see also his (2012) and (2015). Other useful sources include Martha Brandt Bolton (2007) and Michael Ayers (1991).

The Molyneux problem is ably discussed by Martha Brandt Bolton (1994), Laura Berchielli (2002), and Michael Bruno and Eric Mandelbaum (2010).

For Locke's problematic use of simple ideas in the context of epistemology, see Antonia LoLordo (2008).

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## NOTES

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<sup>1</sup> As a second case in point, consider how Joseph Levine illustrates the explanatory gap between brain states and phenomenal character: 'The point I am trying to make was captured by Locke in his discussion of the relation between primary and secondary qualities. He states that the simple ideas which we experience in response to infringements from the external world bear no intelligible relation to the corpuscular processes underlying impingement and response. Rather, the two sets of phenomena – corpuscular processes and simple ideas – are stuck together in an arbitrary manner' (2002, 358). I don't see any relation at all between Levine's point and Locke's.

<sup>2</sup> When we project a concern with phenomenal character into Locke, some very strange results emerge. Robert Pasnau provides an excellent illustration of this when he argues that Locke's primary/secondary quality distinction is obviously right, indeed too obviously right to need much argument: 'Anyone who gets far enough along to distinguish phenomenal experiences from things in the world, and then considers whether the latter might be exactly like the former, has to see immediately that the thesis is impossible... Inanimate objects cannot be characterized in terms of phenomenal experiences—that follows directly from their being inanimate' (2011, 54). But neither Locke nor any of the moderns, as far as I can tell, argue in this way. They do not think that reifying colors would entail that physical objects are conscious.

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<sup>3</sup> I mean this to be a fairly neutral description of the ‘Historical, plain Method’; compare, e.g., Jacovides (2017, 2), who describes the method as ‘looking inward and describing what [Locke] finds as he perceives, conceives, and intuits.’ Throughout the *Essay*, Locke of course goes beyond introspection; whether such forays amount to a departure from the plain method or are instead meant to be part of it is a further issue I cannot settle here.

<sup>4</sup> As Antonia LoLordo (2008) argues, Locke’s claim that all simple ideas are real, true, and adequate is either trivial (since every simple idea must have some cause or other) or false (since tokens of the same idea-type occur in non-veridical contexts).

<sup>5</sup> I owe this point to Kenneth Winkler.

<sup>6</sup> Loose-sense representation might well include more than just indication. It might be thought of as the genus of which both indication and resemblance are species. This is a terminological issue.

<sup>7</sup> There is debate over what precisely to count as the cause of the subject’s experience: is it the spotlight itself, its power to act on us, or the primary qualities by virtue of which it has that power? My own inclination is to count the spotlight’s power to cause the relevant idea as the cause, and to identify the power with the primary qualities that make this causal relationship possible. But any of the others would, I think, be consistent with my claims here.

<sup>8</sup> *Pace* Bolton (1994, 96), I don’t think this sense of ‘judgment’ can be assimilated to the sense in which Locke uses the term in Book IV: ‘the putting *Ideas* together, or separating them from one another in the Mind, when their certain Agreement or Disagreement is not perceived, but presumed to be so’ (4.14.4).

<sup>9</sup> Molyneux’s question first appears in the second edition of the *Essay*, after Molyneux twice posed it in correspondence to Locke. For the history of their exchange, see esp. Martha Bolton (1994).

<sup>10</sup> I am indebted to Antonia LoLordo for helpful comments, and to Michael Jacovides for correspondence on these issues. I am also grateful to the editors for many helpful comments and suggestions.