Both common sense and philosophers of many different schools endorse the claim that perception can be in error. In particular,

(1) Ideas of shape can be false.

For perceptions of shape can falsely represent their objects. Consider a time-honoured example: When I look at a square tower from far away, it looks round. Thus, on a theory that holds that perception is a matter of having ideas, I have a false idea of the shape of the tower.

Locke does not explicitly endorse this claim. Indeed, as has frequently been noted,¹ his Essay Concerning Human Understanding² contains surprisingly little discussion of perceptual error. However, given how obvious perceptual error is in everyday life, and given that Locke never denies that there is perceptual error, it is prima facie reasonable to assume that Locke recognizes its existence.

Conjoining (1) with two other theses for which the Essay provides significant textual evidence and which are almost universally attributed to Locke raises a problem. For the triad consisting of (1) and the following two theses is inconsistent:

(2) Ideas of shape are simple ideas.

(3) All simple ideas are true – in fact, real, true and adequate.

We shall see what Locke means by this in more detail below, but a brief note is sufficient to show that there is a prima facie conflict. Locke explains that “[w]henever the Mind refers any of its Ideas to any things extraneous to them, they are then capable to be called true or false … the Mind in such a reference makes a tacit Supposition of their Conformity to that Thing” (2.32.2). That is, an


idea is true just in case it conforms to the external object it is referred to. Thus, all simple ideas conform to their objects.

The inconsistency is obvious enough to make it unlikely that Locke accepted all three theses without ever noticing that they are jointly inconsistent. He must, it seems, have some way out of the inconsistent triad. But what?

Three possibilities, corresponding to the denial or benign re-interpretation of each claim, come to mind:

(a) “Truth”, “reality” and “adequacy” are to some extent technical terms for Locke, and “conform” is clearly a technical term. Thus, one might try to dissolve the inconsistency by understanding conformity in such a way that the idea of the square tower as round does conform to the square shape of the tower.\(^3\)

(b) One could deny that there actually is any such thing as perceptual error. The most plausible way to do this is to attribute all apparent perceptual error to judgment, thus claiming, for instance, that my idea of the square tower as round is not in error although any judgment that the tower is round would be.\(^4\) This tactic has a long philosophical pedigree. It was a cornerstone of Epicurean canon;\(^5\) and in the 17\(^{th}\) century, Pierre Gassendi took it up and used it as a defense against skepticism.\(^6\)

(c) Finally, one could deny that the idea of the round shape of the tower is actually a simple idea. Of course, since examples of apparent perceptual error can easily be found for other qualities and sense modalities, this strategy would have to be generalized to a wide variety of cases. Clues about how a suitably generalized strategy might work are provided by Locke’s well-known claim, in response to

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\(^3\) The reader may suspect that the way ideas conform to objects is different for primary qualities and secondary qualities, and that it is more difficult for Locke to defend the claim that all ideas of primary qualities conform to their objects. This is why I have chosen error concerning a primary quality as my main example, although I discuss error concerning secondary qualities as well.

\(^4\) Michael Ayers, who is perhaps the most ardent exponent of reading Locke through the lens of Epicurus and Gassendi, suggests something like this reply in a slightly different context. Ayers, *Locke*, 1.166-167.


\(^6\) See canon I in the “Logica Epicuri” of Pierre Gassendi’s *Syntagma Philosophicum*, in his *Opera Omnia* (Lyon: Anisson, 1658), 1.53a. Gassendi clearly has anti-skeptical motivations for holding that all appearances are true, but it is the subject of some dispute whether the same is true for Epicurus. See Stephen Everson, “Epicurus on the Truth of the Senses”, in his *Companions to Ancient Thought I: Epistemology* (Cambridge: Cambridge University Press, 1990).
the Molyneux problem, that “the ideas received by sensation, are often … altered by the judgment, without our taking notice of it” (2.9.8).

I shall consider each of these three possible solutions in turn.

First, however, I want to dispel a worry that might occur to some readers at this point. I remarked earlier that Locke never really discusses perceptual error. Thus, some readers may worry that Locke simply never noticed the existence of perceptual error, or at least never thought it had any philosophical significance, and hence should not be expected to have a response.

There are a number of reasons to think that Locke must have noticed the existence of perceptual error and entertained the possibility that it raises philosophically significant issues. First, as I stated above, perceptual error and its close cousin, perceptual relativity, are obvious features of everyday life. It is thus unlikely that Locke never noticed their existence.

Second, the nature of Locke’s project in the *Essay* suggests that he must have thought about perceptual error at some point. Locke’s over-arching goal is to delineate “the original, certainty, and extent of human knowledge; together, with the grounds and degrees of belief, opinion, and assent” (1.1.2). It is surely relevant to that project to examine the circumstances under which we can arrive at true beliefs based on perception and the ways we can tell when we are in such truth-conducive circumstances. Someone who attempts to ground all knowledge and probability in the ideas received through sense should, surely, be concerned with cases where sensory ideas are misleading or false.

Third, the tradition Locke wrote and was educated in was intermittently obsessed with perceptual error. Such concern was primarily, although by no means exclusively, connected with the alleged skeptical implications of such error. Works ranging from Descartes’ 1st Meditation to Sextus Empiricus’s *Outlines of Scepticism* discussed standard skeptical tropes involving perceptual error, relativity and disagreement: the straight stick that looks bent in water, for instance, and the water that feels warm to one hand and cool to the other. Indeed, Locke himself uses a number of these traditional examples to illustrate or develop the distinction between primary qualities and secondary qualities.

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8 There is some dispute over whether these are meant as arguments for a distinction between primary qualities and secondary qualities or simply as illustrations of that distinction. For the former, see Margaret Atherton, “Ideas in the Mind, Qualities in Body”, in *Ideas in Seventeenth Century Philosophy*, edited by Philip Cummins and Günter Zoeller (Atascadero, CA: Ridgeview, 1993), 117-118. For the latter, see Peter Alexander, *Ideas, Qualities, and Corpuscles* (Cambridge: Cambridge University Press, 1985), 124.
The fact that the same glass of water may feel warm to one hand and cool to the other, for instance, illustrates or supports the thesis that heat is a secondary quality and that nothing like heat as we perceive it exists in the water (2.8.21).

Fourth, Locke notices – and is concerned about – the fact that judgments based on perception can be in error. He thinks, for instance, that it is natural for humans to judge that our ideas of secondary qualities resemble something really in bodies even though this judgment is false: “Men can hardly be brought to think Sweetness and Whiteness are not really in Manna” (2.8.18; cf. 2.8.24). It would be very strange to be concerned about falsity in perceptual judgments without ever considering whether perception itself could be in error.

Thus, there are good reasons to think Locke must have considered perceptual error and its significance. However, two reasons why Locke might not have considered it come to mind, and I would like to rebut them both.

The first is that Locke might not discuss perceptual error because he thought that doing so would lead to a form of skepticism that is unprofitable and an unworthy subject of philosophical reflection. It is often said that Locke is simply not interested in skepticism, whether of the Pyrrhonian or the Cartesian variety, or that he does not take it seriously. Thus, he might think that we should avoid those philosophical topics that give the skeptic a way in.

However, it is simply not true that any attempt to address perceptual error would be fodder for the sort of skepticism about the external world mocked at 4.2.14 or for Pyrrhonian suspension of judgment about the qualities of things. One might instead, for instance, respond to perceptual error by providing a detailed account of the way that reason can correct the senses or that the senses can correct each other. Alternately, one might discuss perceptual error in strictly naturalistic terms. Thus, it is implausible that Locke does not discuss perceptual error because he thought any attempt to do so would lead him towards skepticism about the external world or the qualities of the bodies in it.

The second is that Locke might not address perceptual error because he thinks it is so easily corrected as to be trivial. Now it is true that Locke thinks the senses are self-correcting and self-reinforcing:

Our Senses, in many cases bear witness to the Truth of each other’s report, concerning the Existence of sensible Things without us. He that sees a

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Fire, may, if he doubt whether it be any thing more than a bare Fancy, feel it too; and be convinced, by putting his Hand in it (4.11.7).

However, this does not help dissolve our original inconsistency. Even trivially correctible errors in simple ideas are prima facie inconsistent with the thesis that all simple ideas are real, true and adequate.

II

If we can understand reality, truth and adequacy in such a way that even ideas like the idea of roundness received from the square tower turn out to be real, true and adequate, then we can dissolve our inconsistency. To see whether this suggestion works, we need to examine what Locke means by claiming that all ideas are real, true and adequate and the arguments he offers in defense of this claim. I begin with reality.

Ideas are real, on Locke’s definition, if they are “such as have a Foundation in Nature; such as have a Conformity with the real Being, and Existence of Things, or with their Archetypes” (2.30.1). For real ideas are “designed to be the Marks, whereby we are to know, and distinguish Things, which we have to do with” (2.30.2). The notion of conformity Locke has in mind here is relatively weak. Ideas can serve as marks, and hence conform or correspond, whether they “be only constant Effects, or else exact Resemblances of something in the things themselves: the reality lying in that steady correspondence, they have with the distinct Constitutions of real Beings” (2.30.2).

The two options correspond to the distinction between primary and secondary qualities: “the Ideas of primary Qualities of Bodies, are Resemblances of them, and their Patterns do really exist in the Bodies themselves” (2.8.15) while an idea of a secondary quality is “a bare effect of power” (2.8.25). Thus, Locke claims that ideas succeed as marks of primary qualities just in case they resemble that quality, and they succeed as marks of secondary qualities just in case they are “constant effects” of the relevant quality. I assume that the account of ideas as marks of their causes applies to ideas of both primary and secondary qualities, although Locke does not state this explicitly. Hence, ideas of primary qualities should also be “constant effects” of something in bodies, namely the quality they resemble. In other words, an idea of a primary quality must resemble a quality of the body that caused that idea – and not some other, causally irrelevant, body – in order to be real.

If a simple idea is real, it is thereby also true and adequate. An idea is true, in the relevant sense, \(1\) if the implicit judgment accompanying it – the judgment that the idea corresponds to its object – is true (2.32.4). In this sense, all simple ideas are true because they “must be suitable to those Powers, [God] has placed in external Objects, or else they could not be produced in us” (2.32.14). Ideas are adequate just in case they “perfectly resemble those Archetypes, which the Mind supposes them taken from; which it intends

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\(1\) I discuss the various senses of truth below.
them to stand for; and to which it refers them” (2.31.1). All simple ideas are adequate because “being nothing but the effects of certain Powers in Things, fitted and ordained by GOD, to produce such Sensations in us, they cannot but be correspondent, and adequate to those Powers” (2.31.1). An idea is true and adequate, then, if it corresponds to the quality that produced it, and this correspondence is also what makes it real.\(^{12}\)

There are several different ways to understand how an idea can serve as a mark of its cause:\(^{13}\)

(i) An idea of an object is real just in case that particular idea-token was caused by that particular object-token;

(ii) An idea of an object is real just in case that type of idea is always caused by that type of object; or

(iii) An idea of an object is real just in case that type of idea is caused by that type of object under normal conditions.

Which of the three does Locke have in mind?

Two considerations speak in favor of (i). First, Locke often suggests that it is trivially or tautologically true that simple ideas are real, writing, for example, that simple ideas “must be suitable to those Powers [God] has placed in external Objects, or else they could not be produced in us” (2.32.14). The claim that all simple ideas correspond to their causes in virtue of having been caused by them is tautologically true only as a claim about particular ideas and particular causes.

Second, Locke’s discussion of sensitive knowledge offers some – though limited – support to the token-token reading. The general thrust of Locke’s discussion is that sensitive knowledge is very strictly limited. When I write with ink on paper, I have “a certainty as great, as human nature is capable of” that “I see white and black, and that something really exists, that causes that sensation in me” (4.11.2). However, I do not know that the paper existed a second ago and I do not have any idea what it is like in itself (4.11.9). This at least suggests that sense perception does not inform us about stable patterns.

I said that Locke’s discussion of sensitive knowledge offers the token-token reading only *limited* support. For the ink example continues as follows:

\[^{12}\text{This is more complicated for complex ideas, and complex ideas can be real without being true and adequate.}\]

\[^{13}\text{Compare Martha Brandt Bolton, “Locke on the Semantic and Epistemic Role of Simple Ideas of Sensation”, \textit{Pacific Philosophical Quarterly} 85.3 (301-324), 308.}\]
… I have … the idea … I call white; by which I know that that quality or accident (i.e. whose appearance before my eyes, always causes that idea) doth really exist” (4.11.2, bold mine).

The same passage thus both supports and contradicts the weak, token-token reading of correspondence. Locke’s discussion of sensitive knowledge does not provide clear evidence for this reading or any other.

Locke’s suggestions that it is trivially or tautologically true that simple ideas are real do constitute good evidence for a token-token reading. However, I think that on balance it is clear that Locke is making the stronger claim that idea-types correspond to quality-types in some way. It is easiest to see why this must be so for ideas of primary-quality.\(^\text{14}\) Primary-quality ideas resemble something in bodies. For instance, my ideas of the shape of square things resemble the shape of square things. But all my ideas of the shape of square things also resemble each other. Similarly, all the shapes of square things resemble each other. Thus, it seems, all my ideas of square shapes must resemble all the shapes of various square things.\(^\text{15}\) The claim that primary-quality ideas resemble qualities really in bodies suggests a type-type reading of correspondence, at least for primary-quality ideas.

Both textual and philosophical considerations speak in favor of the type-type reading for ideas of secondary qualities as well. Textually, the claim that simple ideas are “constant effects” bearing a “steady correspondence” with real beings clearly supports a type-type reading (2.30.2). The claim that simple ideas are effects of powers “ordained by our Maker, to produce in us such sensations” (2.30.2) could only fit into the token-token reading by ascribing a very odd view of divine action to Locke. And Locke entertains the possibility of “all Things, that had the texture of a Violet, producing constantly the Idea” that other men call marigold, (2.32.15), which suggests he thinks that in the normal case things with that texture are “producing constantly” the idea of blue.

Philosophically, the claim that all simple ideas are true, real and adequate could not bear the epistemic weight Locke wants it to bear on the trivial, token-token reading. Let me explain what that epistemic weight is. Consider the case of the man who regularly is caused to see yellow by things that cause others to see blue, and who calls those things “blue”. Locke explains that his idea of that color is adequate because he would be able as regularly to distinguish Things for his Use by those Appearances … as if the Appearances, or Ideas in his Mind, received from

\(^{14}\) In this context, it is worth noting that Locke’s suggestions that it is tautologously true that simple ideas are real typically use secondary-quality examples.

\(^{15}\) I do not claim this is conclusive; there are certainly ways of understanding resemblance on which this would not go through. But I do think it is suggestive.
In this passage, Locke explains that the idea-type that steadily corresponds with an object-type in my mind need not be the same one that steadily corresponds with that object-type in your mind. The correspondences need not be the same across different perceivers. However, they do need to be stable for each perceiver if they are going to allow us to “distinguish Things for [our] use”. Sticking just to ideas of secondary qualities, it seems clear that we would not be able to get around in the world successfully if the same violet that sometimes produced the idea of purple other times produced the idea of green, of the smell of gasoline, or of the taste of soap. For the only way in which secondary-quality ideas tell us about the qualities of things is via patterns of correspondence. To know that snow has a quality such as to produce an idea of whiteness in me tells me nothing (other than that an external world exists) if it does not tell me about the relations between that quality and qualities of previously encountered bodies. The sweetness of sugar, to choose another example, helps me distinguish it as edible only because previous sweet things have been edible.

The claim that simple ideas serve as guides for everyday life is central to the Essay. God has given us faculties that suffice for “the comfortable provision for this life and the way that leads to a better” (1.1.5). Our sensory faculties are chief among those faculties, and the sensory faculties deliver simple ideas, singly and in combination. Locke must think that simple ideas mark their objects in something more than the trivial, tautological sense if he is to hold that the various senses are useful to us.

I think it is clear, then, that Locke has some sort of type-type correspondence in mind. But is what he has in mind really (ii)? Surely, he would have noticed that the existence of perceptual error cannot be squared with the claim that idea-types are invariably caused by quality-types. This line of thought leads one to (iii): an idea serves as a mark of a quality (and hence is real) just in case ideas of that type are normally caused by qualities of that type. Of course, it is notoriously difficult to explicate what ‘normal conditions’ are. But surely, it would be better for Locke to rely on a badly explicated notion of normal conditions than to simply ignore the possibility of something as obvious as perceptual error.

An account of marking in terms of normal conditions has a great deal of initial plausibility, but, unfortunately, that plausibility cannot survive closer examination. We need to be careful here. It is plausible that Locke would explain the intentionality of simple ideas in terms of what qualities cause them under normal conditions. What makes my idea of the tower seen from a distance the idea of something round is, plausibly, that such ideas are normally caused by round things. Even more plausibly, what makes my idea of the color of a tomato the idea of red is that it is the sort of idea typically received from things with certain primary qualities. But if what makes my idea the idea of roundness is that such ideas are normally caused by round things, and this idea was not caused by a round thing, then the conclusion that my idea misrepresents the shape of the tower seems inescapable. If an idea marks an object just in case ideas of this type are
typically caused by objects of that type, then the idea of the square tower as round will serve as a mark of something round, thus marking something other than its cause and failing to be real. Any account of marking in terms of normal or ideal conditions will lead to the conclusion that only the ideas received in such conditions need be real, and this is incompatible with Locke’s claim that all simple ideas are real.

So far, we have considered three possible ways to understand Locke’s claim that simple ideas are real in virtue of serving as marks of their causes. Only the second – that an idea of an object is real just in case ideas of that type are always caused by objects of that type – is a viable interpretation. Locke’s claim that “simple Ideas are all real” (2.30.2) is indeed a substantive claim, and one that is prima facie in conflict with the existence of sensory error.

Given this prima facie conflict, it is helpful to consider the justification Locke offers for his claim that all simple ideas are real. He explains that “in simple Ideas … the mind is wholly confined to the Operation of things upon it; and can make to it self no simple Idea, more than what it has received” (2.30.2). Simple ideas are mere passive receipts. This is supposed to justify the claim that simple ideas “answer and agree to those Powers of Things, which produce them in our Minds” (2.30.2), which in turn is supposed to justify their reality.16

This justification relies on Locke’s over-arching conception of human beings as creatures endowed by God with the faculties necessary for the conduct of life and the preservation of our souls. Since simple ideas are received passively, we cannot misuse our faculties in obtaining them; and since those faculties are God-given, they cannot be misleading when used correctly. Locke is careful to explain how this is consistent with the fact that our senses are imperfect:

[W]ere our senses altered, and made much quicker and acuter, the appearance and outward scheme of things would have quite another face to us; and, I am apt to think, would be inconsistent with our being, or at least well-being, in this part of the universe which we inhabit … if by the help of such microscopical eyes (if I may so call them) a man could penetrate further than ordinary into the secret composition and radical texture of bodies, he would not make any great advantage by the change, if such an acute sight would not serve to conduct him to the market and exchange; if he could not see things he was to avoid, at a convenient distance; nor distinguish things he had to do with by those sensible qualities others do… (2.23.12).

This would be a natural place for Locke to discuss the fact that the senses occasionally mis-represent their objects as well as representing them less than perfectly, but no such discussion occurs. While predecessors such as Descartes took pains to explain how

16 In contrast, fantastical ideas – like the idea of a unicorn, the result of combining the ideas of a horse and a horn – always derive from some action of the human mind.
sensory error is consistent with the fact that God endowed us with senses fit for the preservation of the mind-body composite, Locke does no such thing.\(^\text{17}\)

Simple ideas, then, are real because they are passive products of our God-given sensory faculties. Now that we understand what Locke means by claiming that all simple ideas are real and how he justified that claim, let us return to our example, the square tower that looks round.

How does Locke’s argument for the reality of simple ideas work in the case of the idea of roundness received from a distant square tower? On his definition of reality, can that idea count as real? It does not do very well in terms of resemblance: to the extent that I can make sense of an idea of roundness resembling something in the world at all, it seems that it would have to resemble a round thing. However, Locke’s resemblance claim is notoriously tricky, and a number of scholars have suggested either that Locke gets himself into trouble by saying that ideas of primary qualities resemble something really in bodies or that the notion of resemblance must be understood in some highly non-literal way.\(^\text{18}\) Thus, one might think the real issue is the resemblance thesis and not the existence of perceptual error.

However, consider the second, more general way in which ideas mark their causes. Does the idea of roundness received in those circumstances have a law-like correspondence with the shape of the tower? It is hard to see that it does. After all, while square things may always produce ideas of roundness under certain very specific conditions, the all-important caveat “under certain conditions” appears nowhere in Locke’s account. Nor, more importantly, is it consistent with Locke’s justification for the claim that all simple ideas are real. Locke claimed that simple ideas correspond to the relevant qualities because they are produced by those qualities entirely passively – but, as the example of the square tower shows, the object of the idea simply cannot be the only relevant cause. We are entirely passive when we acquire the idea of the tower as round from seeing it far away, and again entirely passive when we acquire the idea of it as square from seeing it close up.\(^\text{19}\) However, the two ideas differ because although the same tower is the object of our ideas, other physical causes have intervened. Atmospheric distortions in the rays of light reflected from the tower, for instance, may make us acquire an idea of it as round when we see it at a distance.

Locke does not take investigation into such phenomena as part of his project. He insists that it is not “the design of [his] present Undertaking, to enquire into the natural

\(^{17}\) See the 6th Meditation: Descartes, *Oeuvres*, 7.88-89.


\(^{19}\) I am bracketing out Molyneux considerations here, but will return to them in section IV.
Causes and manner of Perception” (2.8.4), although, as one would expect given the digressive nature of the Essay, he does make a few brief forays into such enquiries. However, his claim that simple ideas steadily correspond to their causes seems to require such discussion. If all he means is that simple ideas answer to everything causally relevant to their production, this is tautologically true – but it is incompatible with the type-type reading of correspondence. If he means that they correspond to the qualities in bodies that are their objects, then he owes us an argument that rules out the possibility of distortion introduced further along in the perceptual chain. Once we bear cases of perceptual error in mind, it is not at all clear that Locke can legitimately hold that the passivity of sense perception guarantees that simple sensory ideas correspond to their objects.  

III

A second way out of the inconsistent triad is simply to deny that perceptual errors ever occur. Such a denial requires some underlying philosophical work to be at all plausible. One way of denying that there is perceptual error is Berkeley’s – but getting Locke out of the inconsistent triad by turning him into an idealist or phenomenalist seems too high a price to pay.

A second way out is to attribute all apparent perceptual error to error in judgment. This second strategy has an illustrious philosophical pedigree. Epicurus and his followers took the denial of perceptual error as a cornerstone of their philosophy. All sensations or appearances are true, on the Epicurean view, because they are all accurate transcriptions of the information received by the sense organs. In the course of explaining that perception occurs when the sense organs receive simulacra emitted from bodies, Epicurus notes that

Whatever presentation we receive by a form of application, whether by the intellect or by the sense organs, and whether of a shape or of accidents,

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20 For instance, he says that

if we imagine Warmth, as it is in our Hands, to be nothing but a certain sort and degree of Motion in the minute Particles of our Nerves, or animal Spirits, we may understand, how it is possible, that the same Water may at the same time produce the Sensation of Heat in one Hand, and Cold in the other; which yet Figure never does, that never producing the Idea of a square by one Hand, which has produced the Idea of a globe by another (2.8.21).

This is an extremely puzzling passage. For while it may be right that one and the same object perceived at the same time by two different hands never produces two different ideas of shape, the point clearly does not generalize. There is perceptual relativity about primary qualities as well as secondary qualities, and it is hard to see how Locke could not have noticed this.

21 It is somewhat odd that Locke does not notice this, particularly because his explanation of how the same glass of water can produce the idea of warmth in one hand and the idea of coolness in the other explicitly advert to changes introduced in the perceptual chain, viz. the fact that there were antecedent differences in the sorts or degrees of motion in the nerves of the two different hands.
this is the shape of the object ... Falsehood or error always resides in the added opinion. …

The claim that all appearances are true is supposed to be justified by a theory of perception on which perception is the passive reception of data from outside. But it is also supposed to be justified on pragmatic grounds. “It is necessary,” Epicurus says, “to observe all things in accordance with one’s sense-perceptions … so that we can have some sign by which we may make inferences”. For “if you quarrel with all your sense-perceptions you will have nothing to refer to in judging even those sense-perceptions which you claim are false”.

In his attempt to revive a revised form of Epicureanism, Gassendi takes up the truth of the appearances and uses it as a foundation of his logic:

**Canon 1:** Sense is never deceived, and hence every sensation and all Phantasies or appearances are true perceptions.

Sense cannot deceive, Gassendi explains, because all falsity is situated in affirmation or negation and sense does not affirm or deny anything “but only receives into itself species of sensible things and simply apprehends the thing which appears to it through species of it”. When a square tower looks round, for instance, this is because the perceiver has been given the sort of impression typically made by round objects, “for causes which have to be examined by physics”. Gassendi reiterates the two Epicurean reasons for accepting the claim that all appearances are true: It is backed up by an understanding of the way perception works, and it is required in order for us to have any acceptable criterion of truth. He adds that since it is psychologically impossible to doubt all sensation, it is not worthwhile to inquire whether it should be doubted.

The claim that the square tower looks round “for causes that have to be examined by Physics” is central to Gassendi’s explanation of how the truth of the appearances is consistent with the existence of apparent perceptual error. It is most natural to say that

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23 Ibid., DL X.37.

24 Ibid., DL X 152-154.


26 Ibid.

27 Ibid., 1.53b; cf. 3.388b ff.

28 Ibid., 1.53a-b.

29 Ibid., 3.279b.
the object or content of a perception is simply its ultimate cause, for instance, the sun itself. However, this turns out not to be quite right. Appearances are true, on Gassendi’s view, because they are fully accurate transcriptions of the information received at the end of the perceptual chain (e.g., the information the optic nerves carry to the brain). This information comes partly from the distal cause (the square tower), and partly from the way the information that cause provides is altered by the medium and mechanism of perception. Thus the appearances can be true, in the sense of conveying such information accurately, even when the distal object in question appears differently – square to the person close up, for example, and round to the person far away). Of course, one appearance is more likely to suggest the false judgment the tower is square in itself than the other. But the possibility of false judgment gives us no reason for concern about relying on the senses. It merely serves as a warning that we must understand how sense perception works before rushing to judgment based on sensory appearances.

Could Locke have in mind something like this Epicurean defense of the truth of the appearances? At first it looks as if Locke is committed only to the much more restricted thesis that all simple ideas are true and not to the radical thesis that all perceptual ideas are true. However, if we examine the way Lockean ideas can be false, we shall see that the difference is not as great as it initially appears to be.

Ideas are either simple or complex, and complex ideas are either of substances, modes or relations (2.12.3). In what ways can complex ideas be false? Ideas of substance are always false, at least when “looked upon as the Representations of the unknown Essences of Things” (2.32.18), but such errors are not perceptual errors. The problem is the implicit error in judgment made when we suppose that our ideas inform us of the unknown essences of things. Ideas of modes cannot be false since they “[have] no reference to any Pattern existing” (2.32.16). For similar reasons, I think, ideas of relations cannot be false. Thus by holding that all simple ideas are true Locke in effect holds, just as the Epicureans did, that all perception is true.

There are, however, two serious problems for any attempt to ascribe an Epicurean defense of the truth of the appearances to Locke. The first is that the Epicurean defense

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30 Ibid., 1.53a-b.
31 Ibid., 1.54a.
32 I do not discuss abstract ideas since error involving abstract ideas is obviously not perceptual error.
33 Locke does not discuss the truth of relations explicitly. However, it is had to see how ideas of relations could fail to correspond to what they are supposed to correspond to given Locke’s claim that relation “be not contained in the real existence of Things, but something extraneous, and superinduced” (2.25.8).
34 Strictly speaking, one more ingredient is needed to arrive at the claim that all perception is true. One might suspect that even if my ideas of snow and white are both true, the way they come grouped together in sensation is not necessarily so. However, Locke seems to assume that the groupings of ideas presented to us in sensation map onto groupings of qualities in the world (2.31.6, 4.11.2). This is a further claim over and above the truth, reality and adequacy of simple ideas, although not one Locke makes explicit.
relies quite heavily on specifics of the perceptual process. Both Epicurus and Gassendi make clear that an appearance can accurately correspond to the impression made on the brain or the sense organ, thus being true, without accurately corresponding to the external object that is its distal cause. Nothing like this claim is found in Locke, and he does not carry out any of the physical and physiological work that lies behind it. Indeed, as we have seen, Locke makes clear that so doing is not part of his official project:

I shall not … meddle with the Physical Consideration of the Mind; or trouble my self to examine … by what Motions of our Spirits, or Alterations of our Bodies, we come to have any Sensation by our Organs

(1.1.2).

Thus, Locke does not seem to have the resources to defend the claim that all simple ideas are true along Epicurean lines. Moreover, he does not seem to want to. In 2.30-32, Locke’s examples are all examples of ordinary external objects like fires or violets. Far from weakening the Epicurean view by holding that only simple ideas are true, Locke actually holds a much stronger view: ideas correspond to the external objects that caused them rather than the impressions made on sense.

The second problem with attributing an Epicurean defense of the truth of perception to Locke is that the Epicurean defense depends on drawing a sharp distinction between ideas and judgments, one that Locke cannot draw. For Locke’s claim that all simple ideas are real, true and adequate implies that the members of a certain class of perceptual judgment are all true. He explains that ideas are capable of being real when considered “in reference to things from whence they are taken, or which they may be supposed to represent” (2.30.1, bold mine). Similarly, adequate ideas “perfectly represent those Archetypes, which the Mind supposes them taken from” (2.31.1, bold mine). Thus the claim that all simple ideas are real and adequate already includes an implicit supposition – that is, judgment – that they correspond to external objects.

The point is even clearer with regard to the truth of simple ideas, although it requires a bit more work to establish it. Locke distinguishes three senses in which ideas can be called true or false:

(i) The “metaphysical” sense, in which all ideas are true because they are all “really to be such as they exist” (2.32.2);

(ii) The sense in which “the ideas in our minds, being only so many perceptions, or appearances there, none of them are false” (2.30.3), although none of them are true either;

(iii) The sense relying on a “secret or tacit proposition, which is the foundation of that denomination” (2.32.1); for instance, “that tacit mental proposition,

35 Locke could, I suppose, be trusting that the right results would emerge if someone else did the physical and physiological work, but there is no trace of this in the Essay.
wherein a conformity and resemblance is attributed to [the idea], which it has not" (2.32.25). Not all ideas are true in this sense: “[w]henever the mind refers any of its ideas to anything extraneous to them, they are then capable to be called true or false … the mind in such a reference, makes a tacit supposition of their conformity to that thing” (2.32.4). This reference can involve either of two things:

a. “when the mind supposes any idea it has, conformable to that in other men’s minds, called by the same common name” (2.32.5) – in which sense even simple ideas can be false, as the example of the man who is caused to see the color typically caused by marigold when he looks at violets could be used to show;

b. “when the mind supposed any idea it has in itself, to be conformable to some real existence” (2.32.5), so that the idea of a man is true and the idea of a centaur false.36

Sense (ii) is closest to the Epicurean sense in which all appearances are true: it is the sense in which all ideas are true because no element of judgment is involved. If this – or the still weaker sense (i) – were the sense in which Locke were insisting that all simple ideas were true, then it would be entirely natural to understand him as adopting an Epicurean defense of the truth of perception.

However, it is clear that Locke thinks that all simple ideas are true in sense (iii-b) as well: “secret or tacit” propositions of a certain class are all true. Hence, he cannot be using anything like the Epicurean technique:

As to the truth and falsehood of our ideas, in reference to the real existence of things, when that is made the standard of their truth, none of them can be termed false, but only our complex ideas of substances (2.32.13).

Explaining how this works in the case of simple ideas, Locke writes that

… our simple ideas being barely such perceptions, as God has fitted us to receive … their truth consists in nothing else but in such appearances as are produced in us, and must be suitable to those powers he has placed in external objects, or else they could not be produced in us: and thus answering those powers, they are what they should be, true ideas (2.32.14).

Thus by holding that all simple ideas are true, Locke is committed to the claim that all the relevant judgments are true. Hence, his denial of perceptual error cannot turn on the

36 2.32.5 also mentions a third kind of reference, conforming to real essences, but this is not relevant to the truth of simple ideas.
Epicurean tactic of ascribing all error to judgment. Again, Locke’s claim that all simple ideas are real, true and adequate is, on closer examination, much stronger than the Epicurean claim that all appearances are true. The inconsistent triad we began with can no more satisfactorily be solved by Epicureanism than it can by divining a notion of correspondence on which the idea of the square tower as round really does correspond with the shape of the tower.

IV

This brings us to our third and final way out of the inconsistent triad: denying that the idea of roundness received from the square tower is really a simple idea. I suspect that many of Locke’s readers would say that the idea of shape is obviously a simple idea. After all, in 2.5, “Of simple Ideas of divers Senses”, Locke states that “[t]he Ideas we get by more than one Sense, are of Space, or Extension, Figure, Rest, and Motion”. However, Locke’s account of simplicity and his answer to the Molyneux problem complicate this claim. Hence, it is worth investigating whether there is a plausible Lockean case to be made that none of the ideas that may misrepresent their objects are really simple.

What is it for an idea to be simple? Locke provides two different criteria. The first is phenomenal simplicity: a simple idea is “in it self uncompounded [and thus] contains in it nothing but one uniform Appearance, or Conception in the mind, and is not distinguishable into different Ideas” (2.2.1). In other words, a simple idea appears to its possessor to have no parts. The second criterion is passivity: simple ideas are received passively from outside, while complex ideas, relations and abstractions all involve some mental act (2.12.1). Locke seems to suppose that both are individually sufficient. I focus on the first, since it is the passivity of simple ideas that Locke uses to justify their truth, reality and adequacy: phenomenal simplicity plays no role in the argument of 2.30-32.

One reason for suspecting that apparently simple ideas like the idea of roundness are not genuinely simple is provided by Locke’s answer to the Molyneux problem. There Locke advances the thesis that “the ideas received by sensation, are often … altered by the judgment, without our taking notice of it” (2.9.8). Once we learn the correlations between visual and tactile shapes, our judgment alters the idea of “a flat Circle variously shadow’d” (2.9.8) into the more accurate idea of a globe. Although we do not notice the process, it is indisputably an active one. “Our judgment” is doing the altering. Thus, it seems, my idea of the globe cannot really be a simple idea according to the passivity criterion. It is plausible that Locke would say that all visual ideas of size and shape that normal adult human beings possess are altered by judgment in this way, so that none of them will be genuinely simple according to this criterion. Perhaps he might even say the same for ideas of other sense modalities. If this is so, then perhaps Locke could avoid the inconsistent triad by denying that any of the perceptual ideas that can misrepresent their object are really simple.

It will be difficult for Locke to do so, for three reasons. Apparent perceptual error can occur within pretty much any idea of a primary or secondary quality. Hence, this
strategy requires a radical re-assessment of the epistemic significance of the claim that all simple ideas are real, true and adequate. On this strategy, the only ideas guaranteed to be accurate are those that we are never aware of. This will not give us a great deal of help in our day-to-day lives and, as we saw above, the divinely ordained function of simple ideas is to guide us in the conduct of our lives and the preservation of our souls.

Moreover, the various examples of real, true and adequate simple ideas that Locke gives in 2.30-32 – the whiteness and coldness received from snow, the sweetness of sugar – will no longer be apposite. This is not, of course, conclusive, since Locke says that visual ideas of shape are simple when his answer to the Molyneux question casts this into doubt. However, it is implausible that Locke intends his examples of real, true and adequate ideas to refine the earlier account of simplicity in the way that his Molyneux answer may be intended to do: we can read 2.9 as refining 2.5 only because 2.5 precedes it.

Finally, Locke does not offer anything parallel to the Molyneux answer in the case of ideas of say, tastes and colors. Locke’s answer to the Molyneux question does not appear to have any impact on our view of ideas received by only one sense, since the sort of penetration of ideas by judgment that it involves depends on the idea in question being that of a common sensible. Hence, it does not appear to have any impact on our view of ideas of secondary qualities. The Molyneux answer thus cannot help us deal with perceptual error in the case of secondary qualities, since it gives us no reason to suppose that normal adult humans lack conscious simple ideas of secondary qualities.

Conclusions

Locke appears to accept three theses that are jointly inconsistent. I have argued that it is extremely implausible that Locke could never have noticed the problem, and sketched three ways he might answer it. Each of these three ways out, unfortunately, has substantial costs.

One way to answer the problem is to understand the notion of correspondence involved in reality, truth and adequacy in such a weak way that the idea of the square tower as round does correspond to the shape of the tower. Doing this pushes one into a token-token reading of correspondence, however, and this can only be done at the cost of rendering the truth, reality and adequacy of simple ideas unable to do the epistemic work Locke needs it to do.

Interpreting Locke as denying that there is perceptual error is even worse. The only philosophically respectable way I can see of doing so, the Epicurean way, is incompatible with the way Locke explicates his claim that all simple ideas are real, true and adequate, and depends on physical and physiological work that Locke does not carry out and takes to be extraneous to his project. One could, I suppose, simply read Locke as denying that perceptual error occurs without any sophisticated account of why apparent perceptual error is not actually error, but this is unappealing. I think this option is really a non-starter.
The last possibility is to deny that those ideas that can misrepresent their objects are genuinely simple ideas. Such a denial could be grounded in Locke’s claim, in answer to the Molyneux question, that judgment alters the visual ideas of normal adult humans so that they are no longer passive – and, presumably, no longer simple. This also has substantial costs. For one thing, it does not fit the text terribly well: the Molyneux answer applies only to ideas of vision and, while it is relatively natural to see how it might be extended to any ideas received through multiple senses, it is hard to see how it could be extended far enough to cover all the perceptual ideas that can misrepresent their objects. Moreover, this tactic, like the tactic of adopting the tautological, token-token reading of correspondence, ends up vitiating the epistemic significance of the claim that all simple ideas are real, true and adequate.

None of the three possible answers, then, are terribly satisfying. Locke has, as far as I can see, no way to escape the inconsistent triad. Perhaps the reader will be able to discern a fourth, more successful way out.  

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