## Locke on the Semantics of Secondary-Quality Words: A Reply to Matthew Stuart

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Let me first acknowledge the justice of Matthew Stuart's criticism of my earlier treatment of Locke's semantics for secondary-quality words and offer a revised account in its place. I'll then argue that Locke's thesis that secondary qualities are powers to produce ideas in us is not offered as a careful description of a being in the world but rather as a corollary to his semantics. I'll go on to criticize some of what Stuart writes in defense of his own interpretation, according to which Locke believes that objects are only colored when they are seen. Finally, I'll try to show that emphasizing Locke's denial that secondary qualities are real beings helps us understand his flexible use of secondary-quality predicates.

#### 1. Concessive Remarks

I had thought, and I still think, that in order to make sense of Locke's semantics of secondary-quality words we need to understand his statement that "Flame is denominated Hot and Light; Snow White and Cold; and Manna White and Sweet, from the Ideas they produce in us" (2.8.16). In earlier work (Jacovides 1999, 492-93), following Michael Ayers (1991, 1.63-64, 207), I had said that Locke's use of secondary-quality words fit the Aristotelian pattern of focal meaning. In focal meaning, a word is used in a primary sense for one kind of thing—as with 'being' for substance or 'healthy' for living things—and in a derivative sense for things merely connected to the primary referent—as with 'being' for qualities or 'healthy' for food (Metaphysics 4.2, explained in Owen 1986). On my old analysis, Locke believes that ideas are called 'red' in the primary sense and that apples are called 'red' in the derivative sense of producing something that's red in the primary sense.

Stuart offers both a sharp criticism of my account and also a way to escape the criticism. The criticism is that "Locke—who on this reading is supposed to hold that strictly speaking it is *only* ideas or sensations that are colored—never speaks of colored ideas, colored sensations, red ideas, blue sensations, and so forth" (65-66). Good point.

An even more decisive piece of evidence against my previous view comes in a passage where Locke argues that the will cannot rightly be called free, since it isn't an agent. "If Freedom can with any propriety of Speech be applied to a Power," Locke writes,

it may be attributed to the Power, that is in a Man, to produce, or forbear producing Motion in parts of his Body, by choice or preference; which is that which denominates him free, and is Freedom it self. But if any one should ask, whether Freedom were free, he would be suspected, not to understand well what he said; and he would be thought to deserve *Midas's* Ears, who knowing that Rich was a denomination from the possession of Riches, should demand whether Riches themselves were rich (2.21.16).

This argument relies on a paronymy joke with an Ovid reference, so it needs explaining.

Locke asserts that if any power could be called free, it would be the power to move or refrain from bodily motion in accordance with choice. This power is properly called 'freedom,' and when a person has the power, that power "is that which denominates him free, and is Freedom it self" (ibid.)—that is, having the power named 'freedom' is what makes it appropriate to call a person free. According to Locke, it *follows* from the fact that a person is denominated 'free' from a certain power that the power is not itself free. By way of illustration, a person who knows "that Rich was a denomination from the possession of Riches" would be a fool if he went on to ask whether riches are themselves rich. (Midas had preferred Pan's pipes to Apollo's lyre, so Apollo gave Midas donkey's ears to suit his judgment.)<sup>1</sup> More generally, only a fool would wonder whether  $\psi$  might be F when  $\phi$  is denominated F from  $\psi$ . If 'redness' denotes an idea, and things are denominated 'red' by

<sup>&</sup>lt;sup>1</sup> The story is in Book 11 of Ovid's Metamorphoses.

causing such ideas, then, on Locke's view, it's a crude mistake to think that the idea should be described as red. It's as if he is calling across the centuries in order to insult the author of "Locke's Resemblance Theses."

# 2. Paronymy and Concrete Terms

The way out of my difficulty lies in Stuart's remark that the seventeenth-century notion of 'denomination' is closely tied the Aristotelian notion of paronymy. The connection is so close that at least one seventeenth-century logician used the plural noun 'denominates' to translate Aristotle's term 'parōnuma' (Spencer 1970, 142; Stuart 2003, 64, 94n17). Latin textbook writers had translated the Greek word as 'denominativa,' (for example, Du Trieu 1678, 16).

Stuart makes his observation in the course of explaining my old view, but strictly speaking it's incompatible with it. In a case of focal meaning, the very same word gets applied to two different kinds of thing. In paronymy, Aristotle writes, "things get their name from something with a difference of ending" as "for example, the grammarian gets his name from grammar, the brave get theirs from bravery" (*Categories* 1a12-15).

My new view is that on Locke's official semantics 'redness' denotes the idea of red, and roses and fires get called 'red' as paronyms, that is, derivatively and with a change of ending. Recall Locke's semantic thesis in the chapter on primary and secondary qualities, "Flame is denominated Hot and Light; Snow White and Cold; and manna White and Sweet, from the Ideas they produce in us" (2.8.162). His joke about the fool who wonders whether riches are rich show that for Locke,  $\phi$  is denominated F from  $\psi$  if  $\phi$  is called F derivatively and with a change of ending from the name of  $\psi$ . I now maintain that Locke names the ideas that snow produces in us 'whiteness' and 'coldness' and thinks that snow is called 'white' and

'cold' derivatively from the names of those ideas. This fits better than my old view not only with Locke's use of the expression 'denominates' but also with the theory of *Essay* 3.8 ("Of Abstract and Concrete Terms") and the practice of *Essay* 2.8 ("Some farther Considerations concerning our simple *Ideas*").

Locke presents a partial semantics for term endings at *Essay* 3.8, where he distinguishes 'abstract' and 'concrete' terms. Abstract terms include 'humanity,' 'animality,' 'rationality,' and 'whiteness.' They are set off by the suffixes '-ity,' '-ness,' '-ice,' and, in some Latin examples, '-itas' and '-ietas'. Locke borrows the distinction from the scholastic textbooks that he assigned to his students at Oxford. In the opening pages of his *Compendious Philosophy*, Christoph Scheibler distinguishes among simple words as "either 1. *Concrete*, which expresses something *fusedly*, that is to say, *jointly*, for example, 'expert' or 2. *Abstract*, which indicates something separated off from all other things, for example, 'expertise'." Scheibler's point is that concrete words such as 'doctus' refer to a fusion of human being and learning, while 'doctrina' indicates the learning on its own.<sup>3</sup>

On Locke's account, abstract words are "Names of abstract Ideas" (3.8.1). As a consequence, he writes, "every one, at first hearing, perceives the falshood of these Propositions; *Humanity is Animality*, or *Rationality*, or *Whiteness*" (ibid.). According to Locke, these are false because they assert that one idea is identical to another.

In ordinary assertions about external things, we therefore use concrete terms, such as 'man,' 'animal,' 'rational,' and 'white'. "All our Affirmations," Locke writes, "are only in concrete, which is the affirming, not one abstract *idea* to be another, but one abstract *Idea* to

<sup>3</sup> This distinction between concrete and abstract terms stems from Anselm and something like it was widely adopted after him (see Spade 1988).

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<sup>&</sup>lt;sup>2</sup> Vox *Simplex* est vel 1. *Concreta*, quae Res *Concretim*, sive *conjunctim*, exprimit, ut *Doctus*. 2. *Abstracta*, quae aliquid ab aliis omnibus abstractum notat: ut, *Doctrina* (Scheibler 9).

be join'd to another" (ibid.). That is to say, statements of the form  $\phi$  is  $\psi$ , where  $\phi$  and  $\psi$  are replaced by concrete terms assert that two ideas stand to one another in some relation other than identity.

As an example Locke offers, "a Man is White, signifies, that the thing that has the Essence of a Man, has also in it the Essence of Whiteness, which is nothing but a power to produce the idea of Whiteness in one, whose Eyes can discover ordinary Objects" (ibid.). There are two puzzles about this passage that cancel each other out. First, Locke seems to assert that the sentence signifies its truth conditions. How is this compatible with the central thesis of his semantic theory that "Words in their primary or immediate Signification, stand for nothing, but the Ideas of in the Mind of him that uses them" (2.2.2)? Second, how is it compatible with the thesis that the example is supposed to illustrate, that affirmations using concrete terms assert that one abstract idea is joined to another? The answer must be that two immediately signified ideas are related indirectly, through some particular man. That particular man falls under the abstract idea man; thus, the word 'man' may be affirmed of him. He also has the power to produce the idea of whiteness in the sighted; thus, the word 'white' may be affirmed of him.<sup>4</sup>

Locke hardly every uses abstract terms for substantial kinds. He disapproves of such expressions, thinking them scholastic corruptions of classical Latin. He suggests that these corruptions were motivated by "the Doctrine of *substantial Forms*, and the confidence of mistaken Pretenders to a knowledge that they had not," knowledge of the real essences of substances (3.8.2). Locke uses the words 'corporeality' and 'humanity' as names for abstract

<sup>&</sup>lt;sup>4</sup> Here's a third puzzle: is Locke's use of the expression '*idea* of Whiteness' compatible with treating the abstract term 'whiteness' as a name for an idea? Yes. 'Of' is said in many ways, and in this context it works as it does in 'City of Detroit'. (I owe the objection to a referee and to Stuart in correspondence.)

ideas at 4.7.13, but he asks the reader to forgive the expressions ("if I may use those barbarous Terms").

On the other hand, the doctrines that abstract terms are names of ideas and that concrete terms are satisfied by external things fit pretty well with Locke's usage in *Essay* 2.8. Where he uses an abstract term such as 'whiteness' (§\$16-19, 24), 'coldness' (§\$16, 17), 'sweetness' (§18), 'redness' (§19) and 'softness', (§24) he uses it to name an idea, while concrete terms such as 'white' (§\$16, 19, 20, 23), 'cold' (§\$16, 21), and 'sweet' (§16) are predicated of external objects. Locke's remarks about the denomination of objects by concrete secondary-quality terms at 2.8.16 and his remarks about the truth conditions for 'a man is white' in 3.8.1 may be properly reconstructed as a proto-Tarskian semantics for secondary-quality words. An object satisfies the predicate "is white" just in case the object has a power to produce the idea of whiteness.

The value of Locke's treatment is not that it accurately captures the semantics of ordinary language. It doesn't even always capture his usage through most of the *Essay*. Incompatibly with his official account, he describes "Yellowness" as "a Power in Gold," and not as an idea at 2.23.10. Along the same lines, he doesn't use the word 'lightness,' in the *Essay* except once (4.16.4) meaning 'frivolity'; he argues at 3.4.10 that 'light' is "properly" a name for an idea, though, by extension, the word may be applied to the cause of that idea. At 4.7.4, 'Red' and 'Blew' seem to be names of ideas.

The official account of *Essay* 3.8 doesn't seem to govern everything that Locke writes, but understanding it helps for at least two reasons. First, in his chapter on primary and secondary qualities abstract terms do seem to name ideas and concrete terms are almost always applied as predicates to external things. If Locke is going to carefully stick to the linguistic theory of *Essay* 3.8 anywhere else in the *Essay*, we would expect it to be *Essay* 2.8,

where his purpose is "to make the difference between the Qualities in Bodies, and the Ideas produced by them in the Mind, to be distinctly conceived" (2.8.22). To the extent that the chapter on abstract and concrete terms helps us understand that project, we should be grateful for the illumination. Second, the theory of Essay 3.8 lets us understand what he means when he writes "Flame is denominated Hot and Light; Snow White and Cold; and Manna White and Sweet, from the Ideas they produce in us." 'White,' 'Cold,' and 'Sweet' are paronyms derived from the names of our ideas.

### 3. The Irreality of Secondary Qualities

Let me switch topics from semantics to metaphysics. According to Locke, primary qualities are real beings, intrinsic, explanatory entities that inhere in bodies and explain the production of our ideas. In contrast, he doesn't think of secondary qualities as real beings which our predicates ought to track.

At 2.31.2, Locke complains that our terminology is misleading, since "the Things producing in us these simples *Ideas*, are but few of them denominated by us, as if they were only the causes of them; but as if those *ideas* were real Beings in them." With respect to predicates of fire, Locke argues, the word 'painful' is well-framed, while 'hot' and 'light' are misleading: "though Fire be call'd painful to the Touch, whereby is signified the power of producing in us the *Idea* of Pain; yet it is denominated also Light, and Hot; as if Light and Heat, were really something in the Fire, more than a power to excite these *Ideas* in us" (ibid.).

Locke's complaint is not that the words 'light' and 'hot' don't fit his recommended semantics for abstract and concrete terms. Rather, his complaint is that our secondary-quality predicates suggest a false ontology. The contrast he draws with 'painful' implies that he thinks that it would be more accurate to call fire 'lightful' and 'hotful.' On Locke's view,

our present terminology misleads us into thinking that light and hot are "real Beings" in the fire. If they wore their dispositional nature on their sleeves, they wouldn't mislead us in that way.

When Locke denies that faculties are "real beings" (2.21.6), he doesn't mean to "deny there are *Faculties* both in the Body and Mind: they both of them have their *powers* of Operating, else neither the one nor the other could operate. For nothing can operate, that is not able to operate; and that is not able to operate, that has no *power* to operate" (2.21.20). Locke believes talk of powers and faculties is legitimate in philosophy "cloathed in the ordinary fashion and Language of the Country" and intended for a general audience (ibid.). When we are being careful, however, he believes that references to powers may be paraphrased away by talking about what a thing is able to do. Otherwise, ordinary ways of speaking will mislead us into thinking that powers are "so many distinct Agents" (ibid.).

Rejecting the existence of secondary qualities as real beings does not commit one to believing that no object can be rightly described as colored, noisy, tasty, smelly, or warm. A reasonable philosopher may believe that barns are red without believing that any rednesses, either particular or universal, inhere in them (Quine 1980, 10). A realist might object that such philosophers have no account of why all these things are red, if not for the presence of a universal or a trope. Locke would reply that these objects are red because they are apt to produce ideas of red in us.

According to Locke, secondary qualities are not real entities that exist in bodies, and thus philosophers need not investigate deeply the conditions under which they come into existence and go out of existence. On his view, the real and explanatory entities are primary qualities, the bodies in which they inhere, ideas, and the minds in which they inhere. The

states of affairs in which these entities are arrayed are the basic facts that make our assertion about secondary qualities true or false.

I mentioned earlier that Locke uses concrete words as names for ideas at *Essay* 4.7.4. Indeed, whenever Locke uses the concrete word 'red' in the *Essay* as a name (as opposed to using it as a predicate), and it's unambiguous whether it names an idea or a quality, it always names an idea (2.3.1, 2.18.6, 2.32.9, 3.4.11, and 3.4.16). This isn't what we would expect in light of the discussion of concrete and abstract terms at *Essay* 3.8. Nor, for that matter, is it what we would expect in light of Locke's thesis that secondary qualities are "Powers to produce various Sensations in us" (2.8.10). I would explain these oddities as follows: Locke doesn't usually treat powers are proper referents for names, because he doesn't believe that they are existing things. When used as names, concrete terms denote ideas by default.

# 4. Locke's Account of Secondary Qualities as a Semantic Doctrine

Locke doesn't offer direct arguments to show that secondary qualities are "Powers to produce various Sensations in us." Instead, he seems more interested in defending a theory of how primary qualities produce sensory ideas and in denying that our ideas of secondary qualities resemble something in objects. Where does the famous doctrine come from?

To answer the question, let us take a sympathetic step into Locke's way of looking at the world. Suppose you thought that the world, deep down, comprises bodies, their qualities, minds, and their ideas. If you thought that, then you would also think that when we said such things as *red is a warm color, the smell of cut grass is like the smell of unripe almonds,* and *for middle C, the fifth is G,* we were talking about our ideas and drawing comparisons between them. Of course, we mostly use secondary-quality words adjectivally and predicationally, in order, for example, to attribute colors to bodies (*tomatoes turn red as they ripen* and *he's wearing a* 

green shirt). Locke needs a bridge principle to make sense of our application of color words to bodies.

A good portion of scholastic philosophy of language stems from the opening chapter of *de Interpretatione*. There Aristotle asserts, "just as written marks are not the same for all men, neither are spoken sounds. But what these are in the first place signs of—affections of the soul—are the same for all; and what these affections are likenesses of—actual things—are also the same" (16a6-8). Undiluted, the passage suggests that reference between word and object depends on resemblance between idea and object. Locke embraces such a doctrine at least to the extent: of defending the reality of our mathematical knowledge, by appealing to the resemblance between our geometrical ideas and bodies. He writes,

Is it true of the *Idea* of a *Triangle*, that its three Angles are equal to two right ones? It is true also of a *Triangle*, where-ever it really exists. Whatever other Figure exists, that is not exactly answerable to that *Idea* of a *Triangle* in his Mind, is not at all concerned in that proposition (4.4.6).

Locke does not embrace the doctrine to the extent of making resemblance a necessary condition for reference. With respect to color predicates, if the object produces the right idea, the object gets the relevant predicate, whether or not the object resembles the idea: "it is equally from that Appearance [the idea of blue], to be denominated *Blue*, whether it be that real Colour, or only a peculiar Texture in it, that causes in us that *Idea*" (2.32.14).

This is how Locke saves the truth and certainty of our useful ordinary assertions about secondary qualities in the face of his thesis that ideas of secondary qualities do not resemble anything in bodies. On his account a thing is properly called red if it has the power to produce the idea, redness, in us. His claim that secondary qualities are powers to produce ideas in us is not a description of certain objects in the world, but rather a disguised description of how our secondary-quality predicates work.

## 5. Some Criticisms of Stuart's Reading

Stuart argues that Locke believes that bodies *only* are colored when they are being perceived. In this section, I'll quibble with his readings of some texts. In the next section, I'll concede that his interpretation captures a certain tendency of Locke's thought and takes it to its logical extreme.

Stuart cites 2.8.17 in defense of the assertion that "Locke seems to hold that colors vanish and cease when eyes do not see them" (68). Locke sometimes uses the word 'colours' to refer to powers to produce ideas in us and sometimes uses the word to refer to the corresponding ideas. In 2.8.17, it seems to me, he makes it as clear as possible that his reference to colors is to colors considered as ideas: "let not the Eyes see Light, or Nose Smell, and all Colours, Tastes, Odors, and Sounds, as they are such particular *Ideas*, vanish and cease, and are reduced to their Causes *i.e.* Bulk, Figure, and Motion of Parts." Locke doesn't believe that objects produce ideas of colors when no one is looking at them, of course. The passage doesn't show that he denies that they have the corresponding qualities, which is the point that Stuart wants to establish.

According to Stuart, Locke means *qualities* by "Ideas" in this passage. If "Ideas" were taken to refer to ideas, he writes, "one would lose the intended contrast between primary and secondary qualities, since sensations of shapes also go out of existence when the eyes do not see" (93n4). I'm not persuaded. It seems to me that the clause 'as they are such particular *Ideas*' in the phrase, "all Colours, Tastes, Odors, and Sounds, as they are such particular *Ideas*, vanish and cease" means 'like they are in those particular ideas.' Locke's point is that nothing resembling ideas of secondary qualities remains behind when the ideas vanish. Since, on his view, ideas of primary qualities resemble something mind-independent in bodies, the contrast between ideas of primary and secondary qualities would remain.

Stuart (69) also appeals to 2.8.23, where Locke contrasts primary qualities with other qualities on the grounds that primary qualities are "in the things themselves, whether they are perceived or not." In my opinion, Stuart has misunderstood Locke's distinction. The contrast is between primary qualities, which bodies have whether we perceive them or not, and secondary qualities, which bodies lack when they are too small to be perceived. Locke *specifies* that that's the relevant perceptual condition in the previous section. Primary qualities "are sometimes perceived by us, *viz.* when the Bodies they are in, are big enough singly to be discerned" (2.8.22). All bodies have primary qualities, even bodies that have been ground into imperceptibly small pieces (2.8.9), but imperceptibly small bodies lack powers to produce ideas in us.<sup>5</sup>

# 6. Locke's Flexibility Explained

Even though I disagree with Stuart in some of what he writes about the application conditions of secondary-quality predicates, I don't think that much hangs on this. Not believing that these terms correspond to entities in bodiess allows Locke a certain degree of flexibility in his treatment of their semantics. He exploits this flexibility by offering different semantics in different passages, depending on the task at hand.

Sometimes Locke takes the *ordinary conception* that bodies have the secondary qualities that they appear to have to standard observers under standard conditions. At 3.8.1, he says that things are called 'white' if they can produce the idea of whiteness in people whose eyes can see ordinary objects. At 2.23.10, he appeals to ordinary lighting conditions: "to speak truly, Yellowness is not actually in Gold; but is a Power in Gold, to produce that *Idea* in us

<sup>&</sup>lt;sup>5</sup> Similar remarks apply to Stuart's appeal (93n4) to the first sentence of 2.8.17.

by our Eyes, when placed in a due Light." In one passage, Locke suggests that objects don't always have the colors that they have at first glance. He writes, "when we set before our Eyes a round Globe, of any uniform colour, *v.g.* Gold, Alabaster, or Jet, 'tis certain, that the *Idea* thereby imprinted in our Mind, is of a flat Circle variously shadow'd, with several degrees of Light and Brightness coming to our Eyes" (2.9.8). His main point is that after sight presents the mind with an initial array of sense data, judgment habitually constructs a different sort of perception. The passage clearly implies, however, that a solid jet sphere is uniformly black in spite of initially presenting the mind with a variety of ideas of colors.

In contrast Locke sometimes writes as if he believes that everything has the secondary qualities that it seems to have in those circumstances regardless of the circumstances (Rickless 1997, 307-08). He uses this *incorrigible conception* of secondary qualities when he wants to show how well simple ideas represent the world. So, "if Sugar produce in us the *Ideas*, which we call Whiteness, and Sweetness, we are sure there is a power in Sugar to produce those *Ideas* in our Minds, or else they could not have been produced by it" (2.31.2, compare 2.30.2, 2.31.12, 2.32.16; Ayers 1.38-39, Stuart 76). "And this conformity," Locke tells us elsewhere, "is sufficient for real Knowledge" (4.4.4, compare 4.11.2). He also seems to endorse the incorrigible conception of secondary qualities at 4.6.11, where he asserts that if we "put a piece of *Gold* any where by it self, separate from the reach and influence of all other bodies, it will immediately lose all its Colour and Weight." The relevant invisible fluid that sustains the color of gold is presumably light or its medium. He thus implies that objects lose their colors in the absence of light, and so color is not solely determined by the appearance of objects in standard lighting conditions (Stuart 2003, 68).

<sup>&</sup>lt;sup>6</sup> Stuart cites 2.23.10 and 3.8.1 as exceptions to a general rule (95n28).

In accordance with the incorrigible conception, what color are objects when no one is looking at them? Not the color they would seem to have to standard observers in standard conditions, we might think, or the conception would collapse into the ordinary one. Not the color that the object might seem to some possible observer, or each unobserved object will have every possible color. Thus, I concede, if we push hard in a certain direction on the incorrigible conception of secondary qualities, we will end up with something like Stuart's reading.

We have a certain degree of freedom in how we arrange the semantics of these assertions and for some purposes we might prefer to use secondary-quality predicates which work in accordance with the incorrigible conception of secondary qualities and for others we might prefer to use more ordinary predicates. This explains the vacillations in Locke's usage. The workings of our predicates are largely up to us. There is nothing to keep us from decreeing that an object is properly described as 'red' if it appears red to some observer (Bennett 1968, 115).

In light of Locke's ontology, this vacillation is a mere variation of usage that could be nicely handled with his distinction between civil and philosophical uses of language. "By their *civil Use*," he means, "such a communication of Thoughts and *Ideas* by Words, as may serve for the upholding common Conversation and Commerce, about the ordinary Affairs and Conveniencies of civil Life, in the Societies of Men" (3.9.3). If we are using words with these purposes in mind, of course we want to distinguish between red and green paint, even if the paint is in sealed canisters and the canisters are in a dark storeroom. In such contexts, we ought to use the ordinary conception for our secondary-quality predicates.

"By the *Philosophical Use* of Words," Locke means, "such an use of them, as may serve to convey the precise Notions of Things, and to express, in general Propositions,

certain and undoubted truths, which the Mind may rest upon, and be satisfied with, in its search after true Knowledge" (ibid.). The infallible conformity of our simple ideas with the corresponding powers in bodies is, as we have seen, a plank in Locke's account of the reality of our knowledge of the external world. The incorrigible conception of secondary-quality predicates may thus be construed as a semantic solution to an epistemic problem.

If we are willing to grant Locke that an idea of red is produced in us every time an object appears red, we could stipulate either that the predicate 'red' applies to a thing if and only if it produces that idea in normal observational conditions or that the predicate applies if the thing if it produces that idea, whether the circumstances are normal or not. On the civil use of our secondary-quality predicates, bodies have they colors they would seem to have to standard observers under standard conditions. On the philosophical use of our terms, bodies have exactly the colors that they seem to have. The former stipulation is better for practical purposes, while the latter is part of Locke's project of vindicating sensitive knowledge. Bodies will be colored whether we speak with the crowd or with the philosophers. If secondary qualities aren't real beings that our predicates ought to track faithfully, then Locke may reasonably alternate between such views, depending on his goals.<sup>7</sup>

### **Bibliography**

Aristotle. 1963. *Categories and De Interpretatione*, translated with notes by J. L. Ackrill. Oxford: Clarendon Press.

Ayers, Michael. 1991. Locke: Epistemology & Ontology, 2 volumes. London: Routledge.

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- Bennett, Jonathan. 1968. Substance, Reality, and Primary Qualities. In Locke and Berkeley: A

  Collection of Critical Essays, edited by C. B. Martin and D. M. Armstrong, 86-124.

  Garden City, New York: Anchor Books.
- Du Trieu, Phillippe. 1678. Manuductio ad Logicam Sive Dialectica Studiosa Juventuti ad Logicam Praparanda. Oxford: L. Lichfield at T. Bowman's.
- Jacovides, Michael. 1999. Locke's Resemblance Theses. Philosophical Review 108: 461-96.
- Locke, John. 1975. An Essay Concerning Human Understanding, edited by Peter H. Nidditch.

  Oxford: Clarendon Press.
- Owen, G. E. L. 1986. Logic and Metaphysics in some Earlier Works of Aristotle. In *Logic, Science, and Dialectic: Collected Papers in Greek Philosophy,* edited by Martha Nussbaum, 180-99. Ithaca: Cornell University Press.
- Quine, W. V. 1980. On What There Is. In From a Logical Point of View, 3<sup>rd</sup> edition, 1-19.

  Cambridge, Mass.: Harvard University Press.
- Rickless, Samuel C. 1997. Locke on Primary and Secondary Qualities. *Pacific Philosophical Quarterly* 78: 297-319.
- Scheibler, Christoph. 1671. Philosophia Compendiosa, 9th ed. Oxford: Henry Hall.
- Spade, Paul Vincent. 1988. Anselm and the Background to Adam Wodeham's Theory of Abstract and Concrete Terms. Rivista di Storia della Filosofia 2: 261-71.
- Spencer, Thomas. 1970. The Art of Logic. Menston, England: Scolar Press.
- Stuart, Matthew. 2003. Locke's Colors. Philosophical Review 112: 57-96.