

Journal of **Scottish Thought**

Research Articles

Thomas Reid's Only Primary-Secondary Quality Distinction

Author: Christopher Shrock

Volume 4, Issue 1

Pp: 141-150

2011

Published on: 1st Jan 2011

CC Attribution 4.0

1 4 9 5



ABERDEEN
UNIVERSITY PRESS

Thomas Reid's Only Primary-Secondary Quality Distinction

Christopher Shrock

Ryan Nichols's work *Thomas Reid's Theory of Perception*¹ is the most comprehensive contemporary study of the topic for which the book is named. Nichols devotes the sixth chapter of that work to Reid's understanding of the difference between primary and secondary qualities, which is of interest both because Reid's take on this matter seems so much different from other early moderns and because that take is difficult for interpreters to pin down. The author depicts Reid as identifying two categorical distinctions between primary and secondary qualities. First, Nichols argues, the process by which human beings form notions of primary qualities differs from that by which they form notions of secondary qualities. Second, the descriptive 'contents of the notions' differ. Notions of primary qualities are clear, whereas those of secondary qualities are relative. Thus, the two-fold difference concerns both the formation of these notions and their contents. However, the first distinction is incorrect, at least as Nichols describes it. When Reid describes notions of primary qualities as *direct*, he does not mean to say anything about their formation. Rather, these terms, like *clear* and *relative*, refer to the notions themselves. Moreover, in positing a formational distinction, Nichols overlooks the aspects of primary and secondary qualities that distinguish them from those qualities which are neither primary nor secondary. And this leads him to populate the primary and secondary quality categories with qualities that fail to fit either of Reid's descriptions—visible figure, gravity, and the inebriating quality of wine.

Democritus, Descartes, Locke, and Reid all recognize a difference between primary qualities (extension, hardness, motion, and solidity) and secondary qualities (color, sound, smell, taste, and heat). But the first three hold that primary qualities are real mind-independent qualities of physical bodies, whereas the secondary qualities are 'by convention',² or reducible to primary qualities so as to be 'nothing in themselves'.³ On this view, secondary qualities

¹ Ryan Nichols, *Thomas Reid's Theory of Perception* (New York, 2007).

² Democritus, Fragment 9.

³ John Locke, *Essay Concerning Human Understanding* (Oxford, 1975), 2.8.10, 2.8.14, 2.23.9.

depend upon the mind in a way that primary qualities do not. They are ideas, sensations, or relations, but not 'real' qualities.⁴

Reid rejects the explanation that primary and secondary qualities differ with respect to their reality or mind-independence, yet he maintains the categories, offering his own explanation for them. The best summary of his own distinction appears in the *Essays on the Intellectual Powers of Man* (hereafter, *EIP*⁵):

There appears to me to be a real foundation for the distinction; and it is this: That our senses give us a direct and distinct notion of the primary qualities and inform us what they are in themselves: But of the secondary qualities, our senses give us only a relative and obscure notion. They inform us only that they are qualities that affect us in a certain manner, that is, produce in us a certain sensation; but as to what they are in themselves, our senses leave us in the dark. (*EIP*, 2.17/201)

According to Reid, primary and secondary qualities differ in the way they affect human subjects via the senses. Both types of qualities are mind-independent; both are real. The distinction is relative to the conceptions of our minds.

The senses, Reid says, give us a different type of notion of secondary qualities than of primary qualities. He offers several examples that highlight this difference. Consider his example of smelling a rose in the *Inquiry into the Human Mind on the Principles of Common Sense*:⁶

Suppose a person who never had this sense [smell] before, to receive it all at once and to smell a rose ... He finds himself affected in a new way, he knows not why or from what cause. Like a man that feels some pain or pleasure formerly unknown to him, he is conscious that he is not the cause of it himself; but cannot, from the nature of the thing, determine whether it is caused by body or spirit, by something near, or by something at a distance. (*IHM* 2.2/26)

... a little experience will discover to him, that the nose is the organ of sense, and that the air, or something in the air, is a medium of it. And finding, by farther experience, that when a rose is near, he has a

⁴ Ibid., 2.8.17, 2.30.2.

⁵ Thomas Reid, *Essays on the Intellectual Powers of Man* (University Park, PA, 2002).

⁶ Thomas Reid, *Inquiry into the Human Mind on the Principles of Common Sense* (University Park, PA, 1997); hereafter cited in the text as *IHM*.

certain sensation; when it is removed, the sensation is gone; he finds a connection in nature betwixt the rose and this sensation. The rose is considered as a cause, occasion, or antecedent, of the sensation; the sensation as an effect or consequent of the presence of the rose. (*IHM* 2.8/39–40)

Reid cuts a sharp distinction between the smell sensation, a mental event, and the smell quality, which is intrinsic to the body. The perceiver understands the sensation clearly since it is purely phenomenological. But nowhere in the process of smelling the rose does the perceiver discover the intrinsic nature of the smell quality, the property of the rose that produces this sensation. That type of understanding comes by way of scientific investigation, not a smell sensation. Reid notes,

Natural philosophy informs us, that all animal and vegetable bodies, and probably all or most other bodies, while exposed to the air, are continually sending forth effluvia of vast subtilty... All the smell of plants, and of other bodies, is caused by these volatile parts, and is smelled wherever they are scattered in the air. (*IHM* 2.1/25)

Before consulting the scientist or performing an array of experiments, the perceiver has only a relative understanding of the smell. She considers it by its effect, as the cause of the sensation (*EIP* 2.17/202), not as effluvia of a body.

Compare the perception of smelling a rose to that of pressing one's hand against a table. In such a case, Reid claims, one has a sensation, just as when smelling the rose. But the sensation immediately triggers the conception of hardness, the firm adhesion of the parts of the table. He explains,

There is, no doubt, a sensation by which we perceive a body to be hard or soft. This sensation of hardness may easily be had, by pressing one's hand against the table, and attending to the feeling that ensues, setting aside, as much as possible, all thought of the table and its qualities, of any external thing. But it is one thing to have the sensation, and another to attend to it, and make it a distinct object of reflection.

We are so accustomed to use the sensation as a sign, and to pass immediately to the hardness signified... (*IHM* 5.2/55–56)⁷

⁷ See also *EIP*, 2.17/204, which reads, 'When a primary quality is perceived the sensation immediately leads our thought to the quality signified by it and is itself forgot'.

The perceiver does not need the scientist to explain the nature of hardness. He already understands what hardness is—the firm cohesion of a thing’s parts—and that it is a real quality of a body. The understanding follows automatically upon having the sensation.

The examples make clear what Reid means by ‘direct and distinct’ in the case of primary qualities and ‘relative and obscure’ in the case of secondary qualities. The notion of a primary quality that one gains through the senses describes that quality’s intrinsic nature directly, without reference to anything else (for example, ‘the firm cohesion of the parts of the body’). On the other hand, one’s notion of a secondary quality, if acquired via the senses, involves a reference to the sensation caused by that quality, making the notion relative (for example ‘the cause of *that* smell sensation’). Moreover, the level of understanding involved in a sensory notion (that is, a notion gained via the senses) of a primary quality is much higher than that of a secondary quality, distinct (indeed, perfectly so)⁸ in comparison to the secondary quality notion’s obscurity.

One should also note an important similarity among primary and secondary qualities: notions of both quality types are formed via the senses, with sensations acting as natural signs that trigger their corresponding notions. In every case, a physical quality affects the sense organs in such a way that the perceiver experiences a sensation which leads her to conceive of the quality. Reid explains that sensations act as ‘natural signs’, indicating the qualities to the perceiver. Reid’s signs come in three classes: (1) those whose connection with the thing signified is established by nature but discovered only by experience; (2) those where the connection between the sign and thing signified is not only established by nature but discovered to us by a natural principle without reasoning or experience; and, (3) those which suggest or conjure up a notion of the thing signified by a ‘natural kind of magic’ and at once give us a conception of and belief in it (*IHM* 5.3/59–60). Sensations caused by secondary qualities belong to the first class—those which prompt scientific investigation in order to discover connections between signs and the things signified, between sensations and qualities. Sensations triggered by primary qualities are of the third class, which suggests no such investigation as they are immediately understood by common sense. Perceptions of both primary and secondary qualities involve sensations. The difference is in the effects that those sensations have on human minds, on what sorts of notions they prompt.

⁸ See *EIP*, 2.17/201.

Nichols reads Reid's primary-secondary quality distinction as two-fold.⁹ He concurs with the above account contrasting the types of notions involved in perceiving primary and secondary qualities, which he describes as a difference in the 'contents' of those notions – that is, the description that characterizes the understanding inherent in the notion.¹⁰ But, he claims, primary and secondary qualities also vary with respect to the *way* their corresponding notions are formed in perceivers' minds.

Nichols' interpretation focuses on two passages from Reid's corpus – the summary of primary and secondary qualities in the seventeenth chapter of the *The Intellectual Powers* (quoted above in full) and a few sentences from a letter to Lord Kames. The letter reads,

You [Lord Kames] say that secondary Qualities have a Relation to a Percipient. I would say rather that our Notion or Conception of them hath a relation to a percipient. The whiteness of this paper, is that Quality in it, which causes a certain sensation in me when I look upon it. Not knowing what this quality is in itself, I form a relative Notion of it viz. That it is that, which causes such a Sensation in the percipient. It will appear evident to any one who considers the common use of the Word (whiteness) that we don't mean by it in common language, the Sensation, but that in the Body which causes the Sensation ...

Of primary qualities Nature hath given us clear and direct perceptions. I know perfectly what figure and extension are in themselves, as well as how they affect my sense. But of Secondary qualities we know onely how they affect the sense not what they are in themselves.¹¹

Nichols claims that these two passages 'contrast the formation of our notions of primary and secondary qualities'.¹² But a careful reading of the sections illumines no such contrast.

⁹ Nichols, *Thomas Reid's Theory of Perception*, 165–171.

¹⁰ J. Todd Buras, 'The Problem with Thomas Reid's Direct Realism', in John Haldane and Stephen Read (eds), *The Philosophy of Thomas Reid: A Collection of Essays* (Malden, MA, 2003), 44–64, calls this sort of content 'descriptive', distinguishing it from the 'referential content' of a notion, which is the quality to which the notion refers.

¹¹ *Correspondence of Thomas Reid*, (University Park, PA, 2002), C 29; cited in Nichols, *Thomas Reid's Theory of Perception*, 166.

¹² *Ibid.*

To clarify the formational contrast, Nichols offers a formal description of the additional condition he supposes primary qualities must meet:

A perceiver P's notion of quality Q is a notion of a primary quality only if P apprehends Q, and no intermediary is necessarily apprehended in the process.¹³

But even this description might admit of two possible interpretations. The intermediary Nichols has in mind is obviously a sensation. But does he mean that one can perceive a primary quality without *noticing* the sensation involved, or that one might perceive it without involving a sensation at all? It hardly matters. Both interpretations conflict with Reid's expositions on primary and secondary qualities.

In either case, much of Nichols' discussion hinges on Reid's uses of *direct* and *immediate*. He takes *direct* in *EIP* 2.17 (2) (quoted above) to indicate something distinctive about the way that the mind forms conceptions of primary qualities.¹⁴ But this is simply not the case: *direct*, as explained earlier, indicates the sort of notion one has in response to a primary quality sensation—direct as opposed to relative. The content of the notion makes no reference to the sensation in describing the nature of the quality detected. One understands the quality directly, rather than by way of causal relations to other concepts or events. Using 'direct' to modify the way in which the senses give these notions to the mind does not even fit grammatically: the use is adjectival—'our senses give us a direct and distinct notion', not adverbial, 'our senses directly give us'.

Immediate, on the other hand, does indicate something about the way that notions are formed in perception, but not in a way that helps Nichols' case. Concerning the first possible interpretation, Reid clearly states that one can perceive primary qualities without paying any attention to the sensations involved: When a primary quality is perceived, the sensation *immediately* leads our thought to the quality signified by it (that is, without inference) and is itself forgot (*EIP*, 2.17/204). He even says it is difficult to notice the sensation, as one's attention is so quickly drawn to the quality itself (*IHM*, 5.2/56). But this feature of primary qualities does not set them apart from secondary qualities.

¹³ Nichols, *Thomas Reid's Theory of Perception*, 167. Nichols argues that such a condition is important for distinguishing Reid's position from the Way of Ideas, the view attacked in Reid's *Inquiry*.

¹⁴ Nichols, *Thomas Reid's Theory of Perception*, 166–7.

One may also perceive color without attending to its accompanying sensation. Reid explains,

In [visually] feeling a coloured body, the sensation is indifferent, and draws no attention. The quality in the body, which we call its colour, is the only object of attention; and therefore we speak of it, as if it were perceived, and not felt.

There are some sensations, which, though they are very often felt, are never attended to, nor reflected upon. We have no conception of them; and therefore, in language, there is neither any name for them, nor any form of speech that supposes their existence. *Such are the sensations of colour, and of all primary qualities* [italics mine]; and therefore those qualities are said to be perceived, but not to be felt. (*EIP*, 2.18/212)

Thus, color stands as a glaring counterexample to the idea that secondary qualities might be impossible to perceive without attending to their corresponding visual sensations. Moreover, in several places, Reid discusses the tendency to ignore sensations, in order to focus on the external qualities for which those sensations are natural signs, without mentioning the type of sensations or qualities involved (for example, *EIP*, 1.6/60–1; *IHM*, 6.19/166). If Nichols intends that Reid holds that perceivers must notice secondary quality sensations and not primary quality sensations, then these passages contradict him.

The second interpretation will not work either. Conceptions of primary qualities are triggered by sensations. Recall Reid's explicit distinction, 'Our senses give us a direct and distinct notion of the primary qualities' (*EIP*, 2.17/201). In addition, he says of hardness and softness, roughness and smoothness, figure, and motion,

All these, by means of certain corresponding sensations of touch, are presented to the mind as real external qualities; the conception and the belief of them are invariably connected with the corresponding sensations, by an original principle of human nature (*IHM*, 5.4/62).

Without exception, notions of primary qualities come about because of sensations. At no point does Reid so much as hint at anything to the contrary.

Nichols might respond that the primary quality of visible figure, the quality of a body represented by the two dimensional shape presented in one's visual

field, lacks a corresponding sensation.¹⁵ But there are two problems with such a response. First, even if one primary quality were perceivable without sensations, such a case would distinguish that quality from *all* the other qualities, whether primary or secondary. It would not distinguish primary qualities from secondary qualities, except insofar as this odd primary quality would be a member of the set of primary qualities. Second, Reid neither says nor implies that visible figure is a primary quality. Nichols assigns it to the primary qualities on the basis of its mind-independence.¹⁶ But, for Reid, both primary and secondary qualities are mind-independent qualities of bodies, as is apparent in the earlier reference to Reid's letter to Lord Kames.¹⁷ Mind-independence is not a criterion for distinguishing between primary and secondary qualities on Reid's scheme or on Nichols' own interpretation of Reid. Since Reid does not say that visible figure is primary, Nichols owes us a cogent argument for that premise before we can use it to conclude anything about the primary-secondary distinction.

Perhaps it seems counterintuitive that visible figure is not a primary quality and that I owe an argument to the discussion in support of this claim. So here is an argument that, I think, provides *prima facie* reason to hold this view. By definition, a quality is primary only if an ordinary human perceiver forms a direct and distinct notion of it by means of sense perception alone—non-inferentially. Visible figure, understood directly and distinctly, is 'the position of the several parts of a figured body with regard to the eye' (*IHM*, 6.8/98). To form direct and distinct notions of visible figure, then, one must first understand what a figured body is. But notions of figured bodies come by touch, not by sight. An Idomenian whose only sense is sight (see *IHM*, 6.9/106–111) has no conception of a three-dimensionally figured body. Therefore, direct and distinct notions of visible figure come by way of memory and induction, not sense perceptions alone. There is no perceptual experience that, alone, triggers a conception of visible figure as *the position of the several parts of a figured body with regard to the eye*. So, visible figure is not a primary quality, and one cannot use its characteristics to reach sound conclusions concerning the primary-secondary distinction.

There is no exegetical reason to posit any distinction between primary and secondary qualities apart from the one Reid gives explicitly in *EIP*, 2.17: 'Our

¹⁵ *Ibid.*, 169. There is a nice debate on this between Gideon Yaffe and Lorne Falkenstein and Giovanni Grandi in *The Journal of Scottish Philosophy* 1 (2003): 103–40.

¹⁶ *Ibid.*, 117.

¹⁷ Whiteness is a property of the paper, not a sensation in the mind.

senses give us a direct and distinct notion of the primary qualities and inform us what they are in themselves: But of the secondary qualities, our senses give us only a relative and obscure notion'. He mentions no distinction concerning the formation of those notions. Rather, both primary and secondary quality conceptions are triggered by sensations, which are effected by mind-independent objects interacting with the sense organs.

Nichols' interpretation leads him to incorrectly assign properties to primary and secondary quality categories that do not meet Reid's criteria. Visible figure has already been mentioned.¹⁸ But Nichols also places gravity among the secondary qualities.¹⁹ Reid mentions gravity in order to explain the difference between a direct notion and a relative notion (*EIP*, 2.17/201–2). When *gravity* indicates a tendency of things to move toward the earth, the notion is direct because one knows exactly what a tendency is. When *gravity* indicates the cause of such a tendency, the notion is relative because one is ignorant of the nature of that cause. Is it curved spacetime, an exchange of subatomic particles, or something completely different? One's understanding is obscure. But, unlike the secondary qualities, gravity is understood relative to its physical effects on bodies, not sensation types. And, thus, gravity is neither a primary nor a secondary quality, but another sort of occult quality.

Likewise, Nichols labels the inebriating quality of wine a secondary quality.²⁰ He claims that this is so because his 'notion of the microphysical nature of alcohol is not direct and clear since it is based on the testimony of chemists'.²¹ But why would the testimony of chemists cause a notion to fail in directness or clarity? It has already been argued that Reid's use of *direct* has nothing to do with the way in which a notion is formed, whether by way of a chemist's testimony or psychotropic drugs. Rather, a direct notion is one by which the mind understands a quality in itself, without reference to its effects. The inebriating quality of wine is not a primary quality though, like gravity, notions of it are not relative to sensations (at least not the kind associated with sense perceptions), making it neither primary nor secondary.

Before concluding, I want to point out that a small amendment to Nichols' formula changes it into a true and important corollary to Reid's singular primary-secondary quality distinction. This amendment changes the formula

¹⁸ Categorizing visible figure is beyond the scope of this paper. It will suffice to say that Reid does not assign visible figure to a particular sense, so it appears that one could come to a conception of it by a variety of means. See *IHM* 6.7.

¹⁹ Nichols, *Thomas Reid's Theory of Perception*, 171.

²⁰ *Ibid.*, *Thomas Reid's Theory of Perception*, 181.

²¹ *Ibid.*, 181–2.

so that it describes a difference in the way that perceivers come to understand qualities intrinsically (not merely apprehend them). The new formula reads,

A perceiver P's notion of quality Q is a notion of a primary quality only if P apprehends Q *as it is in itself*, and no intermediary is necessarily apprehended in the process.

In other words, a considerable difference between primary and secondary qualities is that, in the case of primary qualities, the perceiver understands the quality in itself by means of perceptions alone and without any other perceptual experiences. By contrast, one comes to understand secondary qualities intrinsically only by means of induction and conceptually relating them to primary qualities. This is why Reid sees secondary qualities as appropriate subjects for scientific investigation while such study is useless in the case of primaries. Moreover, these understandings are what make acquired perceptions possible for Reid.

According to Reid, the physical qualities of bodies interact with the sense organs, triggering sensations in the mind, which, in turn, causes one to form notions of those physical qualities. Primary and secondary qualities differ with respect to the types of notions one forms in such cases. But Nichols goes too far in saying that these qualities necessarily differ with respect to the ways in which they form such notions. And this extra criterion leads him to expand the primary and secondary quality categories beyond Reid's intended scope.

Baylor University