

Primary and Secondary Qualities

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From examining John Locke's distinction between primary and secondary qualities in an object and Bishop George Berkeley's refutation to Locke's argument, it is the case that Berkeley presents a better view of primary and secondary qualities in objects, also revealing the unsoundness of Locke's argument. For this essay, I will reconstruct both arguments concerning primary and secondary qualities and prove, using my own observatory experiences, the superiority of Berkeley's view.

In his *Essay Concerning Human Understanding*, John Locke offers the argument that objects in the world have primary qualities and secondary qualities. For primary qualities, Locke claims that primary qualities are qualities, which exist within the body of an object and really exist outside of our perception. He names these qualities to be bulk, number, figure, and motion (Locke II.8 §9). He supports this claim by stating that if one were to alter the object such as by dividing it, one would find that those primary qualities listed above will always remain (Locke II.8 §9).

One such example he gives to illustrate the soundness of this argument is a grain of wheat. Locke asks:

Take a grain of wheat, divide it into two parts; each part has still solidity, extension, figure, and mobility: divide it again, and it retains still the same qualities; and so divide it on, till the parts become insensible; they must retain still each of them all those qualities. For division (which is all that a mill, or pestle, or any other body, does upon another, in reducing it to sensible parts) can never take away either solidity, extension, figure, or mobility from any body, but only makes two or more distinct separate masses of matter. (Locke II.8 §9)

Locke's example shows that if one were to separate or alter an object, for example a grain of wheat, one would find that the wheat will still possess the aforementioned qualities of bulk, figure, motion, and extension no matter how many times one separates it; since those qualities are built into the design of the object being separated.

For secondary qualities, Locke claims that they are only powers the object has to cause us to have ideas of color, smell, taste, sound, and texture; these qualities do not actually exist within the object. He supports this claim by stating that primary qualities are objective; whereas, secondary qualities are contingent on perception (Locke II.8 §10).

This point is explained in his example of hot and cold water. He challenges the reader to refute him:

Explain how water felt as cold by one hand may be warm to the other. Ideas being thus distinguished and understood, we may be able to give an account how the same water, at the same time, may produce the idea of cold by one hand and of heat by the other: whereas it is impossible that the same water, if those ideas were really in it, should at the same time be both hot and cold. (Locke II.8 §21)

This example shows that sensible properties such as warm or cold are not actually within the object. If one were to place his or her hand into a bowl of hot water and the other into a bowl of cold water and then afterwards, placed both of those hands quickly into a bowl of warm water, how can one account for the fact that one hand may perceive water as warm while the other hand may perceive the same water as cold? In essence, Locke is saying that such sense qualities cannot exist within the object, but rather, they are only powers, which produce in us ideas of things like warm or cold.

In evaluation of this example, we can not say that the water the person in the example is feeling is hot, since he feels coldness in the other hand, yet at the same time we cannot say he is feeling coldness either. Rather, the person in the example is still feeling the effects from the hot water in one hand and cold water in the other to allow him to say that he has the idea of hotness in one hand and coldness in the other. His hands being in the warm water bowl does not cause this effect. We can say then that things do have powers, which cause us to have certain ideas, for if the person's hands had not been originally in the hot and cold water but were still placed in the warm water, he or she would've experienced warmness.

Given these two arguments of primary and secondary qualities, Locke is essentially saying that there is indeed a distinction between these two types of qualities. However, Bishop George Berkeley refutes Locke's argument by offering his own. Berkeley argues that there is no distinction between primary and secondary qualities. Specifically, he states:

In short, let anyone consider those arguments which are thought manifestly to prove that colours and taste exist only in the mind, and he shall find they may with equal force be brought to prove the same thing of extension, figure, and motion. (Berkeley §15)

What Berkeley is saying in this text is that if one is to accept the argument that secondary qualities such as color, taste, smell, etc. exist only within the mind then we must say the same thing about primary qualities as well.

He supports this claim by offering an observation about primary qualities. He states:

Great and small, swift and slow, are allowed to exist nowhere without the mind, being entirely relative, and changing as the frame or position of the organs of sense varies. (Berkeley §11)

What he is saying here to prove his argument is that primary qualities such as motion, figure, and extension are too relative to the perceiver as secondary qualities. Given this, one can infer then that there is no distinction between primary and secondary qualities; since, both are contingent upon the mode of how one is viewing them.

This argument is further supplemented in Berkeley's use of Locke's water example. He explains:

It is said that heat and cold are affections only of the mind, and not at all patterns of real beings, existing in the corporeal substances which excite them, for that the same body which appears cold to one hand seems warm to another. Now, why may we not as well argue that figure and extension are not patterns or resemblances of qualities existing in matter, because to the same eye at different stations, or eyes of a different texture at the same station, they appear various, and cannot therefore be the images of anything settled and determinate without the mind. (Berkeley §14)

What Berkeley is explaining in this text is that we may be able to state that hot and cold are only ideas within one's mind because certain objects or sensations may feel hot to one hand, yet the same sensations may appear cold to the other and that both of those sensations are effects from the secondary qualities of the water, but can we not say the same thing about such primary qualities as texture or figure? Berkeley answers yes. Since perception of some object may appear to have some kind of texture, but to a different set of eyes from a different position, that texture may appear to be different, so one can say that there is no distinction between primary

and secondary qualities. Both are perceived differently by different people from different positions.

Upon examining my own observatory experiences, I must say that Berkeley presents a better view. Take for example a mirage in the desert. Depending on my position, a particular area of sand may appear to me to be a lake of water, but upon closer inspection, I can see that the thing which I had previously experienced as water was actually nothing. The appearance of even a simple quality such as form disappears under this different condition.

Another example is an examination of a table. For the sake of the example, let us say that I am examining a table. I am standing directly in front of the table, and from my perspective, the table appears to me to be very detailed. I can see the fine details within the wood – the grains, natural wood patterns, and even different shades of color within the wood. All of these things I can see from my perspective on the condition that I am up close to the table. Suppose another person were in the room, but he or she were to be positioned much farther back, perhaps even several yards back. The table that that person is seeing will not be the same table as I am seeing in both its primary and secondary qualities. From his or her perspective, the table may look like a simple solid brown, whereas from my position I would see brown as well as other shades of colors. From up close the texture may appear to be bumpy or grainy, but from a farther perspective, it may appear to be smooth, and in regards to something like form, the table from up close will appear to be a table, whereas from far away – perhaps very far away – the table may only appear to be a brown inconceivable figure. In this case, its very design will appear to have transformed completely. Given this example, I can at least say that the qualities, which Locke refers to as primary are nothing more than just secondary qualities, since they too are contingent upon the perceiver and the position of the perceiver as well as perhaps the environment one is in.

Given these examples then, I can say that Berkeley's refutation of Locke's distinction between primary and secondary qualities is a sound one. Since, one can easily see through his or her own observations the fluidity of both the primary and secondary qualities of things. The very act of movement inhibits this change. What may appear to me to be a solid-colored inconceivable object from one position may actually be a multicolored, well-detailed flower on closer inspection. From these examples, if we were to accept Locke's theory of secondary qualities, we must also apply them to the primary qualities as well, since even the form, extension, or motion of something can change under the right conditions as would color, texture, or anything else sensible.

Finally, within the body of Berkeley's essay, he challenges the reader to refute his criticism of Locke's argument. He states:

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

In other words, he is asking the reader to try to imagine a primary quality such as extension and motion but devoid of color or any other sense quality. He feels it is impossible.

Upon undertaking this challenge, I feel the same way. I too cannot conceive of an object that does not possess a sensible quality such as color, for instance. The closest example would probably be a piece of glass. Since, it has primary qualities such as extension, solidity, and figure, but it is questionable to say if it has color. Rather, we can interpret an object like glass's color as being contingent to the environment and the one viewing the glass provided we were to accept Locke's argument. If I were to hold the glass up to something that is red, then the glass would cause me to have the idea of red. Likewise, if I were to hold the glass up to something that is blue, it would cause me to have the idea of blue. Furthermore, if someone standing beside me were to view the piece of glass, from his or her perspective, it may appear to be a different color, which would cause him or her to have an idea of the color he or she is seeing. In this case, if we were to accept Locke's explanation we would say that the color of something like a piece of glass is fluid and changing from different perspectives. Nevertheless, it still contains both primary and secondary qualities, since it is solid and it causes us to have the idea of some color.

From examining Locke's distinction between primary and secondary qualities and Berkeley's refutation of those qualities, I am compelled to say that I favor Berkeley's view. Given an examination and analysis of real world examples, there indeed does not appear to be a distinction between primary and secondary qualities, we cannot know if qualities such as extension, figure, solidity, or motion, exist within the object itself because like secondary qualities, our perception of those things can change under certain conditions, change in position being an example.

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