

The Problem of Perceptual Relativity

In the philosophy of perception, one is often confronted with the following perceptual phenomenon: perceptual relativity. The problem of perceptual relativity is the following. An object of perception can look different ways to multiple perceivers as well as to a single perceiver. This phenomenon seems particularly problematic, however, because objects of perception are objectively one way or some other. So the question resulting from the phenomenon of perceptual relativity is: “How can an object that has determinate properties look different from how it is objectively to multiple perceivers or to a single perceiver?”

Both representational realist theories of perception and direct realist theories of perception have offered explanations of perceptual relativity. Of the representational theories of perception, the sense datum theory (SD-theory) has offered an explanation of perceptual relativity. Of the direct realist theories of perception, George Pitcher in *A Theory of Perception*¹ defends a form of direct realism, also offering an explanation to account for perceptual relativity. I will argue that the explanation of perceptual relativity offered by the SD-theory is better than its direct realist rival.

1. The Phenomenon of Perceptual Relativity

I will begin with a concrete example of the phenomenon. An example of perceptual relativity comes from Pitcher’s *A Theory of Perception*. Mountains that (we suppose) are really green, from a distance look purple.² How can the mountains be both purple and green? Other similar examples of perceptual relativity can also be given, such as a shirt that looks green to one subject and gray to another; or “a straight stick [that is] half submerged in water looks bent”³ to a subject, but appears straight to the same subject when it is not submerged in water. How can

¹ *A Theory of Perception*, George Pitcher, Princeton, 1971.

² *A Theory of Perception*, George Pitcher, Princeton, 1971, p. 28, cf. “The Argument from Perceptual Relativity.”

³ *Ibid.*, p. 28, cf. “The Argument from Perceptual Relativity.”

these perceptual differences be explained when it is the case that objects are, in themselves, objectively one determinate way?⁴

2. Perceptual Relativity According to the Sense Datum Theory (SD-Theory)

According to the SD-theorist, to perceive a physical object is just to be presented with sense data that are representations of the physical object of perception. A sense datum is a mental representation of the object that is not identical with the physical object itself. Because sense data are not identical with the physical object, or part of the physical object, physical objects can appear to multiple subjects or to a single subject in some way that differs from its real constitution.

In attempts to explain perceptual relativity, the SD-theorist claims that what we are directly aware of when we perceive a physical object is a sense datum, and not the object itself. Pitcher claims that “[s]ense data are introduced to explain the fact that under varying conditions objects appear to have a vast range of different colors, shapes, sizes, and whatnot, although we conceive of them as really having, usually, only one color (or pattern of colors), one shape, one size, and so on.”⁵ If I see a tomato on the table, according to the SD-theory of perception, I am directly aware of a red, round bulgy sense datum, in which the sense datum is not identical with the physical object itself. Because the sense datum is not identical with the physical object itself, it can be the case that objects appear different from how they actually, or objectively, are. That is, an object can appear to possess multiple qualities while only having determinate properties in which these different apparent qualities belong to sense data.

⁴ It should be noted that I am making the assumption that objects are objectively only one, determinate way. An argument could be made, for example, that because objects appear differently to different subjects under identical observation conditions, or differently to the same subject under different observation conditions, then the object itself does not possess determinate properties. I assume that this argument is a fallacy because it is a non sequitur. That is, just because an object appears differently, does not entail that that object does not possess determinate properties or qualities.

⁵ *A Theory of Perception*, Pitcher, p. 30.

A more concrete case will help to better illustrate the SD-theorist's explanation of perceptual relativity, where perceptual relativity can occur in either standard or non-standard observation conditions. Using Pitcher's own example of the green hills that appear purple from a distance, what is purple, is the sense datum the perceiver sees, not the mountains themselves. The same explanation holds true for different perceivers looking at the same object. Borrowing another example from Pitcher, suppose a red sweater is placed in front of two subjects. Subject-A has normal color vision and describes the sweater as red. Subject-B is red-green color-blind and describes the sweater as gray. How can the sweater be both gray and red? The SD-theorist has a seemingly satisfactory answer. Both subjects are only directly aware of sense data, and because sense data are not identical to the physical sweater itself; there is no inconsistency in maintaining that both subjects visually experience the sweater differently. Moreover, because sense data are metaphysically private to a subject and because they are not identical with the physical object of perception, there seems to be no metaphysical difficulty in claiming that the sweater is both red and gray. The apparent qualities perceived belong to the sense data, not the physical object itself. Perceptual relativity, then, seems to be a philosophical problem for the direct realist who claims that we are directly aware of physical objects themselves,⁶ that is, we directly perceive physical objects as they are. It would seem, at least initially, that on the direct realist account, things like sweaters could not be both red and gray.

3. Perceptual Relativity According to Pitcher's Doxastic Version of Direct Realism

The theory of perception that Pitcher offers in *A Theory of Perception* avoids the metaphysical problems as well as the epistemological consequences of the SD-theory because it is a direct realist account of perception that excludes sense data. (Briefly, sense data have a

⁶ Even if it is the case that the direct realist acknowledges that objects we directly perceive can appear different from how they are objectively, she still needs to account for perceptual relativity.

questionable metaphysical status. Because sense data are mind-dependent, they have a special, intermittent existence that must be accounted for. Also, what sense data are, that is, their ontological status, is not entirely clear. Furthermore, on standard physiological accounts of perception, it is not clear that sense data can play a causally efficacious role in perception. Regarding epistemological consequences, because our knowledge is limited to the mind and its ideas, we cannot have knowledge the external world exists.) Because Pitcher's account does not face these metaphysical problems or epistemological consequences, then it seems as though we have good reason to accept his direct realist account over his rival, the SD-theory, a representational account of perception.

Returning to the SD-theory and its explanation of perceptual relativity, in both standard⁷ and non-standard⁸ observation conditions, what we are directly aware of when we see a certain object is a sense datum that is distinct from the object itself. Pitcher argues that this conclusion is not warranted from the argument from perceptual relativity. Pitcher argues that the argument from perceptual relativity rests on the following assumption. “[I]f something, x, looks F to someone (to speak just of vision for a moment), then where x is not in fact F, something else—y, different from x really is F and is being seen by that person, (or the person, at any rate, is aware, in a visual mode, of y.”⁹ This assumption captures what the SD-theorist assumes, that if an object looks different than it actually is, something else, a sense datum, possesses that property or quality that the observer sees.¹⁰ Pitcher argues that we have no reason to think that we are

⁷ I will take standard conditions of observation to be the following: appropriate lighting, normal color vision, no external distorting medium or device and similar conditions. Standard conditions also assume that an external object is causing the perceptual episode.

⁸ Non-standard conditions include inadequate lighting, non-normal color vision, presence of some distorting medium, etc.

⁹ *A Theory of Perception*, Pitcher, p. 32.

¹⁰ It should be noted, however, that the SD-theorist also claims that all we ever see is sense data. So even in cases where the subject (under standard observation conditions) sees the object as having certain qualities that it does possess, even then, the subject is only ever directly confronted with sense data.

only ever directly presented with sense data and not the physical object itself. He argues that his theory will offer the better explanation of perceptual relativity, one in which we are directly presented with physical objects themselves.

According to Pitcher, when two subjects see the same object differently, or even the same subject sees the same object different from how the object actually is, they are directly seeing the physical object itself. According to Pitcher, “when a person sees something that looks, say, green to him, but is not really green, there is no call whatever to suppose that some other object, y, different from x, actually is green and is being seen by that person.”¹¹ Returning to the argument from perceptual relativity, the SD-theorist claims that the person who sees the green hills as purple is just seeing a purple sense datum. Pitcher rejects this explanation due to the metaphysical and epistemological problems associated with sense data and offers a different explanation of perceptual relativity. On Pitcher’s view, we can explain the fact that objects can look different from how they actually are without also being committed to sense data. According to Pitcher, the person who sees green mountains as purple does see the physical green hills themselves; she maintains that there is something that is purple—the way that mountains look to her, and not a sense datum. For Pitcher, then, multiple perceivers or even just a single perceiver can see (this applies to other senses as well) the same object different from how the object objectively is because the way the object looks is different from how it actually is.¹²

Pitcher further elaborates and qualifies his position by stating that when a subject is in this perceptual situation (i.e., seeing the green mountains as purple), she is in a perceptual state that is similar to the one she is in when she sees other objects of that similar color—like lilacs, purple crayons and plums. Furthermore, we can explain her perceptual state by referring to the

¹¹ *A Theory of Perception*, Pitcher, pp. 37-38.

¹² One might ask at this point whether we can be directly aware of the physical object itself, as it is if it can appear different from its objective look.

non-standard aspect of the situation. Pitcher comments, “[t]he abberent perceptual state can be explained by reference to whatever is non-standard in the total situation in the relevant respect...”¹³ Given this explanation, if some object looks purple to some observer when it is actually green, she might be wearing purple goggles, or she might be standing at an incredible distance from the object. According to Pitcher, there is no good reason to conclude that what she sees is a sense datum. Pitcher states:

There is no need to appeal to a metaphysically private [purple] object, that is to a [purple] sense datum: for there is no difficulty whatever in the supposition that the perceiver is (directly) aware of the (non-[purple]) object x itself, but that because of some non-standard condition(s), the thing happens to look [purple] to [her].¹⁴

For Pitcher’s account of perceptual relativity to be understood adequately, it should be understood in the context of his theory of perception. According to Pitcher, to perceive a physical object is just to acquire (at least some) true beliefs about that object. For example, when a subject sees an apple, she acquires the following (perceptual) beliefs about the apple. “There is an apple in front of me at such-and-such a distance. The apple is red. The apple is roughly round. The apple is of such-and-such a size. The apple is ripe.”¹⁵ Pitcher adopts a dispositional account of belief. Beliefs are just dispositions. Specifically, Pitcher is a behaviorist and he views beliefs as behavioral dispositions. A person’s behavior, then, is an indication of a perceptual belief she holds, while the perceptual belief itself is an indication of the physical process of perception—neuron stimulation. The following example that I borrow from Pitcher will help to clarify his position. Suppose that someone who has normal color vision comes to a red traffic light. Assuming she obeys the relevant traffic laws, she will apply her

¹³ Pitcher, p. 38.

¹⁴ Ibid.

¹⁵ It might be argued by some (such as John Foster in *The Nature of Perception*, Oxford University Press, NY, 2000) that this belief does not result just from an object’s sensible appearance, but from an additional inference involving prior knowledge (such as what the color of a ripe apple of this kind is) as well.

brakes, stopping the car. For her to see the red traffic light, is just for her environment to induce various dispositions in her to behave. Her action (or behavior) of stopping the car is an indication of her perceptual belief that the traffic light is red, coupled with her knowledge of traffic laws.

Pitcher's account of perception is an improvement on the SD-theory because it avoids the metaphysical difficulties the SD-theory faces. First, on Pitcher's account, perceptual beliefs can endure even after sensing an object; beliefs can be recalled whereas sense data cannot. Beliefs, unlike sense data, are not plagued by the metaphysical oddity of intermittent existence. The second metaphysical problem with sense data is their ontological status—what are they exactly? Because they are metaphysically private, they are difficult to describe. Additionally, because sense data are non-physical, it is not clear that sense data can be a causally relevant link in a causal, physiological theory of perception.¹⁶ On the first charge, beliefs are understood as a (feature of a) perceptual (mental) state, but they are not metaphysically private like sense data. Perceptual beliefs are physically manifest because perceptual beliefs are just dispositions to behave, a person's behavior or action is an indication of certain perceptual beliefs. Furthermore, on a dispositional account of beliefs, where beliefs are dispositions to behave, behavior is physical as well as related to physical, spatial objects. Since displayed behavior is physical and can be located in the physical universe, the perceptual beliefs of a subject can be physically grounded. Behavior, as a feature of a perceptual belief, or indication of a perceptual belief,

¹⁶ It might be argued that beliefs are non-physical and therefore face similar problems of causal efficacy that sense data do. While this might be true that because perceptual beliefs are non-physical, they cannot be a contiguous cause of an observable effect (on Pitcher's explanation, this would be some displayed behavior), perceptual beliefs can be physically manifest. Perceptual beliefs can be said to (loosely) cause behavior in which behavior is a physical indication of or corresponds to some perceptual belief. Behavior is viewed as a response to some perceptual belief on Pitcher's account. (Causes and effects do not have to be contiguous—think of the interaction between the moon and the tides in which the moon is integral to the motion of the tides.)

allows us to locate effects of perceptual beliefs in the physical world.¹⁷ The same cannot be said for sense data. In terms of metaphysical economy, there is no need to refer to an extra non-physical entity that is metaphysically problematic.

In addition to having a metaphysical advantage over the SD-theory, Pitcher's doxastic theory also has an epistemological advantage. On his theory, one can be directly aware of physical objects themselves, avoiding the skeptical consequences of the SD-theory. An epistemological advantage of Pitcher's theory is that one can acquire true beliefs¹⁸ about the external world and its objects, whereas this is not the case with the SD-theory.

4. Is Pitcher's Account of Perceptual Relativity a Satisfactory Explanation?

In spite of the metaphysical and epistemological advantages of Pitcher's theory of perception, the question that must be addressed is whether his theory provides the better explanation of perceptual relativity. As it currently stands, Pitcher's explanation of perceptual relativity is considerably deficient.

According to Pitcher's explanation, objects of perception can appear different from how they actually are because objects can look different from their objective appearance to perceivers. There is an explanation needed, however, as to why this is the case. Unless Pitcher can provide a better explanation as to why things can look different than they are,¹⁹ his theory seems to be somewhat bankrupt in terms of providing an explanation of perceptual relativity.

One of the reasons that Pitcher's explanation of perceptual relativity is deficient is because it only addresses perceptual relativity occurring in non-standard conditions of

¹⁷ Behavior that is physically displayed is an indication of a perceptual belief and a perceptual belief is an indication of the physical aspect of perception—the stimulation of neurons that occurs at the end of the causal chain of perception. For a more detailed account of the causal chain of perception, see “The Argument from Physiology,” Pitcher, p. 43ff.

¹⁸ These true beliefs must have been caused in the right way to be justified items of knowledge.

¹⁹ Recall the explanation of perceptual relativity according to the SD-theory. Objects can appear different from their objective appearance because all we are ever directly aware of is sense data in which sense data are distinct from the physical object itself.

observation. In explaining perceptual relativity, Pitcher defers to whatever is non-standard in the perceptual episode to explain how objects can look different from how they actually are.

Returning to the mountain example, green mountains can look purple to an observer if there is something non-standard about the conditions of observation. For example, the observer is wearing purple goggles.

This explanation of perceptual relativity misses the mark, however, because it does not address the issue at stake—why the objects themselves can look different from how they actually are. Pitcher never answers this question because he just refers to the non-standard condition of the perceptual episode. But this explanation does not account for why it is that the object itself can look different from its objective appearance in other perceptual conditions. Additionally, as the problem of perceptual relativity is stipulated, instances of perceptual relativity do occur even under standard conditions of observation. Referring to the SD-theorist’s explanation of perceptual relativity, in both standard and non-standard conditions, all we are ever directly aware of is sense data. The SD-theorist can account for instances of perceptual relativity that might occur in either case, even though they do appeal to metaphysically problematic entities. The SD-theorist provides an answer to the question: “Why can objects look different from how they are objectively?” Pitcher’s theory, on the other hand, does not provide an answer for why is it the case that that things can look different from how they actually are in standard conditions. Given the explanation that he does give, it seems as though his theory is only equipped to handle cases of perceptual relativity under non-standard conditions of observation.²⁰ An explanation is needed, then, by Pitcher, of why the objects can look different from how they actually are, minus

²⁰ A good philosophical theory of perception should provide an explanation that accounts for perceptual relativity in both standard and non-standard conditions since the competitor theory, the SD-theory, provides an explanation that fulfills this requirement.

non-standard conditions.²¹

Another reason why Pitcher's explanation of perceptual relativity is deficient is because it does not make any reference to the "phenomenal content" of perceptual experience.²² Pitcher's theory of perception in general is absent of any reference to the phenomenal content of perceptual experience. His account does not seem to tell us what it is (in the case of vision) to see an object. His account is one that only discusses what information is coincident upon perception. Specifically, he gives an account of perception in which perception is defined as the acquisition of beliefs that carry information about the objects of perception. Pitcher's theory of perception does not seem to provide an adequate response to the problem of perceptual relativity because the problem of perceptual relativity is one about the phenomenal content of experience. The problem of perceptual relativity is one about phenomenal content because it is a problem of how an object can sensibly appear in some way that is different from how it actually is. Clearly, Pitcher's theory does not include an explanation of the phenomenal content of perceptual experience and instead focuses on perceptual experience as a process that results in the acquisition of information about the external world via true beliefs.²³ Pitcher's theory is therefore not adequate to address the problem of perceptual relativity.

The question now is whether we should reject direct realism²⁴ because its explanation of perceptual relativity is deficient, accepting instead, a version of representational theory, specifically, the SD-theory. We do have to reject direct realism on these grounds in favor of a

²¹ This criticism of Pitcher's account is not to suggest that the explanation he gives of perceptual relativity in non-standard conditions is adequate.

²² I borrow the term 'phenomenal content' from Foster in his *The Nature of Perception*, Oxford University Press, NY, 2000. Phenomenal content is a term used to describe the way that some object sensibly appears or looks to you. It is only one component of perceptual experience, a component that is missing from Pitcher's theory of perception.

²³ This is of course provided that the perceptual beliefs are caused in the right way—only veridical experience counts.

²⁴ In terms of rejecting direct realism, we are rejecting it because its rival, the SD-theory, is the better theory in this one respect of explaining perceptual relativity.

representational theory of perception. While accepting a representational theory of perception might leave us with problematic metaphysical and epistemological consequences, perhaps we should abandon all versions of physical realism, espousing some version or other of idealism.²⁵

²⁵ For this solution, see *The Nature of Perception*, John Foster, Oxford University Press, 2001.