Perceptual Modes of Presentation

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Abstract

Representational externalism is the view that what an individual’s mental state represents is determined in part by facts external to the individual. Representationalism has it that we are only ever aware of what we represent to be the case. According to phenomenal internalism, what it is like to perceive—the phenomenal character of perceptual states—is determined wholly by facts internal to the perceiver. Each thesis has compelling arguments and intuitions behind it, but taken together they are inconsistent, so something has to give. Quite a few philosophers hold the first two while denying the third, but this leaves them with the task of explaining away powerful intuitions favoring phenomenal internalism. This paper accounts for what it is like to see a property in terms of perceptual modes of presentation and shows that this can accommodate intuitions in favor of phenomenal internalism without vindicating the thesis itself.

Keywords: Consciousness; externalism; mode of presentation; phenomenal internalism; representation.

Introduction

When I look at the green grass, I am in a perceptual state that has as its content, among other things, a particular shade of green. The fact that I have no concept of that shade of green does not interfere with my perceptual state picking it out, since perceptual states present us with a rich array of information that we usually conceptualize only in the coarsest terms. Also, when I perceptually represent that shade of green, there is something that it is like for me to do so. Just what this what it is like is supposed to be, and how it relates to what my perceptual state represents are two big problems in consciousness studies today.

The central claim of this paper is that what it is like to see green or any other perceptible property is just the perceptual mode of presentation of that property. Perceptual modes of presentation are important because they help resolve a tension in current work on consciousness. Philosophers are pulled by three mutually inconsistent theses: representational externalism, representationalism, and phenomenal internalism. I throw my hat in with defenders of the first two: the externalist representationalists. We are faced with the problem of explaining away intuitions that favor phenomenal internalism. Perceptual modes of presentation account for what it is like to see properties in a way that comfortably accommodates those intuitions without vindicating phenomenal internalism itself. Perceptual MoPs therefore provide a new way of being an externalist representationalist.

The next section explicates the three theses just mentioned and shows why they are inconsistent and how some philosophers stand with respect to them. Section three explains why phenomenal internalism presents such worries for externalist representationalists. Section four looks briefly at some problems with using modes of presentation to address these worries, section five presents the account of perceptual MoPs, and sections six applies the proposal.

Three’s a Crowd

Philosophers working on consciousness must deal with the tension created by three, mutually inconsistent theses, each of which has its own intuitive and theoretical appeal. The first concerns what determines the contents of mental states and the last two regard the nature of what it is like to be in those states. Representational externalism is the view that what an individual’s mental state represents is determined in part by facts external to the individual. That is, facts outside of the skin of the representer play an ineliminable role in determining what that individual represents. It is in part because I am in an environment that contains water that some of my beliefs manage to be about water, for example (Putnam, 1975). Representationalism has it that we are only ever aware of what we represent. Representationalists believe that what it is like to see a shade of color, hear a sound, or what have you, can be exhaustively explained in terms of what is perceptually represented, though they disagree about many points of detail. According to phenomenal internalism, what it is like to see a shade of color—the phenomenal character of such a perceptual state—is wholly determined by facts internal to the perceiver. It may be that what one believes depends on the environment in which one exists, but what it is like for one to perceive depends on how one is built from the skin-in. If one were to create a molecule for molecule duplicate of a perceiver, for example, that copy might differ in what (and even whether) it represents, but what it is like for that creature, phenomenally, is just what it is like for the perceiver.

One can accept any two of these views, but taken together they are inconsistent, and philosophers can be sorted as to which pair among the three they accept. Ned Block (1990; 1996) accepts representational externalism.
but thinks that what it is like is internally determined. This
 commits him to denying representationalism since what it is
 like, if internally determined, cannot exhaustively be
 explained in terms of (externally determined)
 representational facts. His use of inverted spectrum and
 inverted earth examples is meant both to pump intuitions in
 favor of phenomenal internalism and to argue against
 representationalism. Michael Thau (2002) is, like Block, a
 phenomenal internalist, but he is also a representationalist.
 Thau is swayed by the intuitive plausibility of spectrum
 inversion and related cases that favor phenomenal
 internalism but he does not think that this spells trouble for
 representationalism. Thau claims that the content of
 perceptual representations is wholly internally determined,
 so he rejects representational externalism for perceptual
 states. He accepts representational externalism for belief
 states, however, which results in his claim that perceptual
 states do not represent what our belief states do. Though
 we form beliefs about the colors of objects on the basis of
 perceiving them, we do not, on Thau’s view, perceptually
 represent colors at all.

 Fred Dretske (1995), Gilbert Harman (1990), William
 Lycan (1996), and Michael Tye (1995; 2000), despite their
 differences, accept representational externalism and
 representationalism, so they are committed to the view that
 what it is like is in part externally determined. While Block
 and Thau embrace phenomenal internalism, this group—the
 representationalists—must explain away intuitions in favor of it. The strategy is usually to show that
 in some interesting sense what it is like is determined by
 facts internal to perceivers but it is not wholly determined
 by facts internal to perceivers. Exactly how one does this,
 of course, depends on one’s account of perceptual
 awareness. The account on offer here—explaining what it
 is like in terms of perceptual modes of presentation—is
 new but it has natural affinities with information theoretic
 approaches to perceptual content found in Dretske and Tye.
 Before presenting the account, however, let’s look at why
 phenomenal internalism is so appealing.

 Phenomenal Internalism’s Appeal
 It is difficult to see how facts about what we perceptually
 represent alone can account for what it is like to perceive,
 given that representation is externally determined. First,
 there are powerful intuitions that perceivers can be alike in
 what features of the world they pick out perceptually, but
 nevertheless differ in what it is like for them to do so. This
 idea is rendered most (in)famously as the inverted spectrum
 hypothesis (Block 1990; 1996). Paul and Molly are best
 friends and neighbors who live and work in the same
 environment. When they look at the grass they agree that it
 is a specific shade of green. In the perceptually rich sense
 of ‘looks’, the grass looks that shade of green to both of
 them. Nevertheless, what it is like for Molly to see that
 shade of green is what it is like for Paul to see fire engine
 red and vice versa. That is, there is something about
 perceptual states—what it is like to be in them, their
 phenomenal character, or what have you—that cannot be
 captured in terms of the intentional, externally determined
 content of those perceptual states. It is possible for subjects
 to be identical in terms of what they represent to be the case
 and yet differ in what it is like for them to do so. To the
 extent that such a scenario is intuitively plausible, the
 externalist representationalists’ story seems to capture
 something but not everything about what it is like to see
 color. Furthermore, what plausibly accounts for the
 differences between Paul and Molly is something about
 how they are built on the inside. It is because they are
 different in their internal constitution—despite being alike
 in what they perceptually represent—that they differ in
 what it is like to see green.

 For Thau (2002), the worry is not that
 representationalism is false, but that if it is true Paul and
 Molly cannot perceptually represent the colors. That is,
 their perceptual judgments concerning the grass’ color
 coincide—the contents are externally determined—and
 pick out the green of the grass. On the other hand, the
 perceptual states that give rise to these judgments have
different contents that are wholly internally determined.
When Paul looks at the grass he forms a perceptual state
that represents the instantiation of some property, $G$.
Whenever he has a state with that content he tends to judge
 that the object he sees is green. Molly’s corresponding
 perceptual state represents the presence of $R$, which leads to
 her judgments that objects are green. It needn’t be that $R$
 and $G$ are the same properties or even that they are color
 properties for them to serve as an internally determined
 basis for judgments concerning the greenness of objects.
 In this sense, what it is like for Paul to see green can differ
 from what it is like for Molly because they perceptually
 represent different properties when they see a given shade
 of green.

 Inversion per se is not the problem here. The worry is
 that perceivers can be alike in what external facts they
 represent but nevertheless differ, somehow, in what it is
 like for them to do so. Subjects may be inverted, but they
 may just be different, and in either case, the
 representationalist has some explaining to do. Recently,
have argued that undetectable inter-subjective inversion is
 not as significant for theories of perceptual awareness as the
 possibility of differences in what it is like between subjects
 despite their representational identity. I agree. Whether the
 differences are detectable and whether it is a genuine
 inversion, as opposed to some other kind of difference,
 are points orthogonal to the worry that representational
 representationalism cannot account for what it is like. That
 being said, inversion still has an appeal that eludes other
 ways of expressing the problem. Toward the end of the
 paper in section seven there will be occasion to revisit
 inversion per se as a worry for theories of perceptual
 awareness.

 There is another and less talked about scenario that can
 push intuitions in favor of phenomenal internalism.
Scientists and philosophers are far from agreed that colors are physical properties of the objects that seem to have them. They do agree, however, that if colors are physical properties of the objects that seem to have them then even the maximally determinate perceptible shades of color are either complicated messes of surface spectral reflectances (Hilbert, 1987; Byrne & Hilbert, 2003) or complicated messes of micro-physical properties (Armstrong, 1968; Smart, 1975). Also, if colors are not those messy physical properties, then those messy properties are the physical properties that our color experiences track. Now, though we perceptually represent a shade of green when looking at the grass, greenness doesn’t in any interesting sense seem to be a messy set of reflectances or microphysical properties. So, the story goes, it cannot just be the shade of green—or the property that such an experience tracks—that accounts for what it is like to see it. Something internal to perceivers is responsible for what it is like to see green. Greenness itself, whatever it is, is not up to the job of accounting for what it is like to see it. This problem—call it the manifest image problem—has not generated as much discussion as the inverted spectrum in relation to consciousness, though it has a long history in discussions of color.\(^{1}\) The manifest image problem admits of both Blockean and Thauean responses along similar lines to how their responses to the inverted spectrum problem.

The remainder of this paper shows that perceptual modes of presentation can accommodate intuitions in favor of phenomenal internalism without vindicating the thesis itself. The next section reviews some reasons for thinking it is a good idea to appeal to MoPs in solving this problem and some reasons for caution in this regard.

**Good MoP – Bad MoP**

Modes of presentation are a useful tool for dealing with the manifest image and inverted spectrum problems because they are a way of distinguishing what is represented from how it is represented. Peter Carruthers points out that “My perceptual state when I see something red surely does not represent a reflective property as such.” (2000, 143) That being said, there are two problems with appealing to MoPs to solve these problems.

First, it is usually said that we think of objects under modes of presentation. (Cf. Evans, 1982) I see the grass as green and having a certain texture and when I think of grass it is usually as this green, grassy-textured thing. My Martian friend, who is just as good at identifying grass as I am, sees it as being chlorophyllic and having certain electromagnetic properties, and thinks of grass in those terms. The grass has all of these properties, so neither of us misrepresents the grass. The Martian, however, can no more see greenness and texture than I can see chlorophyll or the electromagnetic properties. We pick out grass in virtue of being able to see different sets of properties and we therefore think of grass in terms of different properties or under different modes of presentation. But Dretske (1995) has pointed out that the phenomenal character of experience rests with the perceptual representation of properties, not thoughts about objects. In the present context, the worry is that subjects can be alike in perceptually representing a given property but differ in what it is like for them to do so. Perceptual MoPs are supposed to account for this difference, so instead of applying to thoughts about objects they must apply to sensations of properties.

Second, we must explain these MoPs in purely representationalist terms. Without a representationalist account of MoPs, invoking them is a bit unhelpful. As Thau (2002, 46-47) notes:

It’s all well and good to suggest that there might be a kind of mode of presentation that can do the job here— that is, that can directly affect representational content, and, hence, account for the internally determined way things perceptually seem to subjects—but, if it is to amount to more than just a suggestion, some account of what these modes of presentation are like must be given. Thau is pessimistic about MoPs’ prospects, but the following explicates a kind of MoP that the externalist representationalist can deploy to explain away intuitions in favor of phenomenal internalism.

**Perceptual Modes of Presentation**

To begin, think about how we perceive shapes, in contrast to how we see colors. Some simple facts about squares are that they are all four sided, have sides of equal length, have equal internal angles, have straight sides, have at least two sides, and so on. Now it is one thing for something to be true of squares and quite another for that fact to be something we can come to know solely on the basis of perceiving squares. In the case of shape perception, however, it seems as though we can come to know very much about what it is to be a given shape on the basis of seeing that shape. It is not just being square, but being four sided, having sides of equal length, and so on, that are perceptible properties: we can come to know that they are instantiated just on the basis of seeing them. So whenever our visual system and the world conspire to let us know that there is a square out there, they also let us know that there is something four-sided out there, that there is a cornered thing out there, and so on.

This point about shape perception may seem quite uninteresting, but it turns out to be rather significant. To see why, it helps to consider what this point is not. First, it is not that in order to be square an object must be four-sided and so on. True as it is, this fact about squares and says

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\(^{1}\) A brief aside for color cognoscenti: Hardin (1993) and Boghossian and Velleman (1989; 1990) take the manifest image problem and related issues to show that colors are not physical properties of the objects that seem to have them. Though I disagree, this is not the place to argue about color. What follows shows that the manifest image problem is not really a problem even if one is a physicalist because the problem is solved by appeal to the nature of perceptual awareness, not the nature of color.
nothing at all about the perceivers of squares. Second, it is not that it is overwhelmingly likely that everyone *knows* or at least believes that squares have four sides, right angles and so on. This is a fact about the perceivers of squares, but an uninteresting one: most people know something or other about what makes a square a square. Third, it is not that everyone with the concept of a square also has concepts of corneredness, laterality, and so on. This is an interesting fact about those who have the concept of squares, but not relevant to the point being made here. By comparison, my point is that information about what makes a square a square is perceptually available. We come to know about these features necessary for the instantiation of squareness, such as corneredness and laterality, in the same way that we come to know about squareness: by looking.

It is admittedly a bit difficult to imagine, but consider a creature so constructed that it is just as good as humans at perceptually registering planar shapes. It can tell squares from pentagons and circles as well as any of us. This creature differs from us, however, in that it cannot tell, just by looking, that squares have four sides and pentagons five. Casual visual inspection of the world does not reveal that these shapes differ in laterality, though some clever science might just do the trick. Because of the way it perceives the world, this creature requires a scientific inquiry into the nature of shape properties while we have a much easier time. Perhaps this creature would not thrive in environments such as those in which our own visual systems have evolved, but this is beside the point.

This creature may seem like a philosopher’s implausible dream, but it turns out that our color perception works very much like this creature’s perception of shape. As noted above, if colors are physical properties of the objects that seem to have them, then we seem able to know only very little about them just by looking. Look at the grass and you can see that it is green, that the green is a bit unsaturated, that it is greenish, and perhaps a bit yellowish but not bluish, unless you’re in Kentucky.² That is the most one can usually say about the grass’ color just by looking, and that is not much, considering the complicated natures of the colors. A reflectance, for example, tells you what percentage of light a surface reflects for each of the visible wavelengths of light. Large sets of these reflectances—the determinate perceptible shades of color—are related to one another in a myriad of ways to which we have no perceptual access. We need scientific investigation to reveal these properties of colored objects just as the hypothetical creature needs science to ascertain the sidedness of objects that have certain shapes.

The upshot is that perceptual representations make information about the ambient environment available to the cognitive faculties of an agent, but they are selective in how they do this. It is important to distinguish this from a point William Lycan (1996, 54) and others have made: “...our perceptual processors are *filters*; they take in and retain only a tiny and tendentiously selected fraction of the information available in an object under scrutiny.” Lycan’s point is that perceptual processors leave a lot of information alone; there is a lot of information that they do not carry. As we will see in the following sections, any state that carries information about squareness also carries information about corners, sides, and the like. Nevertheless, creatures can be alike in the information that their perceptual systems carry but differ in what parts of that information they are able to use. The creature perceptually represents squareness, but its perceptual representation does not make information about sides and corners perceptually available.

Let’s say that the *perceptual mode of presentation* of a property, *P*, for observer *O* is just the set of properties *P* that *O*’s perceptual system makes available whenever it makes *P* available. Perceptual availability, as I appeal to it can be understood in terms of perceptual states licensing non-inferential judgments concerning the instantiation of properties in the environment. It is likely they do more than that, but for now this weak claim is all that is needed because at issue is what it is like to perceive properties. Furthermore, at issue is not so much the *licensing per se*, but the way in which perceptual states naturally lead one to make such judgments, regardless of the warrant these judgments thereby obtain. The creature cannot make the non-inferential perceptual judgment that four-sidedness is present whenever it is in a position to make that judgment about squareness. Our perceptual systems, by contrast, make information about four-sidedness available whenever they make information about squareness available. We both perceptually represent squareness, but under different perceptual MoPs. There is doubtless an interesting story to tell about just how perceptual states lead to and license non-inferential judgments.

Second, the availability mentioned here is front-end availability, or what it is about the deliverer of information that makes it available, and not what it is about the consumer that allows it to use that information. Perceptual MoPs concern the perceptual system’s part in making information available to one’s cognitive faculties. The cognitive faculties themselves—the back end of availability—need to be built so as to take advantage of this front-end availability. One might think that availability cannot be cleanly cut into front-end and back-end capacities. In fact this is an open empirical question.

Third, perceptual availability may amount to different things for different kinds of perceivers. For humans, MoPs and availability can be understood in terms of non-

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² For a more detailed exposition of this distinction between colors and shapes, as paradigm examples of primary and secondary qualities, see my (2005). Aydede and Güzeldere (2005) have an interesting way of distinguishing the concepts of colors from shapes that is in line with the distinction being drawn here. They claim that we form *sensory* concepts of the perceptually represented qualities to which we have little perceptual access while we form *perceptual* concepts of those qualities to which our perceptual representations afford us access. Their idea is that perceptual concepts are built up from perceptual representations of qualities for which we can only have sensory concepts.
inferential judgments. For less sophisticated creatures, availability may amount to something less than the ability to make *bona fide* judgments. Whatever the analogues of belief and knowledge are for your average catbird or ringed seal, information can be made perceptually available in terms of those analogues.

Perceptual MoPs distinguish what is represented from how it is represented. In that sense, they count as modes of presentation, though they work differently than MoPs ordinarily conceived. Usually, MoPs are conceived as ways of thinking of objects, perhaps insofar as one is able to think of a set of properties that uniquely identifies a given object. Here, MoPs are ways of sensing properties.

The next section argues that perceptual MoPs can be identified with what it is like to see a property, that they respect the intuitions behind phenomenal internalism without vindicating the thesis itself, and that perceptual MoPs respect the externalist representationalist requirement that we are only ever aware of what we perceptually represent to be the case. Despite its appeal, phenomenal internalism must go.

**MoPPing up the Mess**

To begin, we can identify the perceptual MoP of a property with what it is like to see that property. The question, “What is it like to see green?” is notoriously difficult to answer. On the one hand, we are being asked to say something about ourselves, but on the other, it is a long-standing observation that in such situations there is little we can do except describe what the property is like, as far as we can tell by looking. When asked what it is like to see squares we tell someone what squares are like as far as we can tell by looking. When asked what it is like to see a property, that they respect the intuitions behind phenomenal internalism without vindicating the thesis itself, and that perceptual MoPs respect the externalist representationalist requirement that we are only ever aware of what we perceptually represent to be the case. Despite its appeal, phenomenal internalism must go.

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Second, how does this proposal about what it is like to see a property accommodate the intuitions that favor phenomenal internalism? Put simply, the perceptual MoP of a property depends on how our perceptual systems are built. The creature without access to the constituents of shape properties must be built to process information about shape quite differently than we are, just as our lack of access to the constituents of colors results from our internal disposition. In that sense, what it is like to see a property is internally determined.

At this point it is rather easy to respond to the manifest image problem articulated in section three. When we perceptually represent a shade of green, we are aware of that shade of green under a perceptual MoP that only gives us access to a limited number of its constituents. That is why these messy sets of reflectances can both (a) be the colors, and (b) not relate to how colors perceptually seem in any obvious way. It is not just that colors are not perceptually represented as reflectances per se, but that they are not perceptually represented in such a way that we can know about all of the respects in which they are intrinsically related to one another. Also, if two creatures are alike in the colors they can represent objects as having but differ in their perceptual MoPs of those properties, they can differ in what it is like for them to see colors. In this sense, we have a response to part of the inverted spectrum problem from section three. There is a sense in which perceivers can be alike in the colors they represent objects as having but differ in what it is like for them to do so. The last step in this section is to show that perceptual MoPs can account for these problem cases while respecting the externalist representationalists’ requirement that we are only ever aware of what we perceptually represent to be the case.

Perceptual MoPs do not require that we are ever aware of the information-carrying states of our perceptual systems themselves or any other intrinsic qualities of perceptual states—cf., e.g., Block (1990; 1996). One perceptual representation of a property presents that property differently from another perceptual representation of it just in case one makes information about some of the property’s constituents available that the other does not. The effect that these MoPs have on what it is like to see things can be understood in terms of the beliefs that one can form based on perceptual representations. Given that information about the colors’ constituents is not perceptually available, we cannot form beliefs to the effect that objects have those constituents on the basis of perceiving the colors alone, whereas the hypothetical creatures mentioned above can do just that. Furthermore, nothing has been said to suggest that the content of these representations is wholly internally determined, as Thau (2002) would have it. That is, this proposal is consistent with externalist representationalism, and not just representationalism.

In sum, perceptual MoPs do the job they are designed to do. First, they can plausibly be identified with what it is like to see a property. Second, they account for the intuition that there is an internal determiner of what it is like so they handle the manifest image problem and at least part of the inverted spectrum problem. And third, they do not require that we are ever aware of anything but what we perceptually represent to be the case while being consistent with representational externalism. Even though the structure of the perceptual representation determines the perceptual MoP, one needn’t ever be aware of perceptual
representations or their structure. The one lacuna, it seems, is the intuition that inversion per se is possible. So far nothing has been said as to whether genuine inversion is possible, or what special problems this introduces for perceptual MoPs.

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References