Representationalism, Inversion and Color Constancy

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Abstract

Sydney Shoemaker has gone to great lengths to defend a representationalist view of phenomenal character, and yet he describes this view as breaking with standard representationalism in two ways. First, he thinks his representationalist position is consistent with the possibility of spectrum inversion, and second, he thinks there are qualia. Thus, we can think of his position in the qualia debate as moderate representationalism (or, equally, moderate qualia realism) by taking up some middle ground between these two major camps. This “moderate” view faces several problems. Here I will very briefly explain Shoemaker’s representationalist account of spectrum inversion in which he appeals to the existence of a certain sort of subjective property of objects, namely, what he calls appearance properties (formerly he called these phenomenal properties). I will argue that an alternative version of representationalism provides a more plausible explanation of both inversion-type scenarios and Shoemaker’s color constancy case, which he uses to motivate the existence of these subjective properties, without positing appearance properties at all.

Part of getting a handle on the qualia debate is getting a handle on what is meant by ‘qualia’. The qualia debate is focused upon addressing three distinct, but related, questions about qualia: Are qualia intentional properties of experience? Are they functionally definable? And, are they physical properties? But before attempting to classify qualia in these terms, we must have some pre-theoretic grasp of what qualia are supposed to be. This pre-theoretic understanding of what is meant by ‘qualia’ must be one that is common to the most discrepant theories of qualia. Of course, there is much disagreement as to whether qualia are intentional, functional or physical properties, but presumably there is something unambiguous in what is meant by ‘qualia’ in this disagreement. Qualia are mental properties, or even more neutrally, they are features of mental experience. They are the Nagelian “what it is like” aspect of experience—an experience’s phenomenal character. That much
I take as uncontroversial.\textsuperscript{1} So let our pre-theoretic definition of ‘qualia’ be this: Qualia are the phenomenal character of experience. If someone uses ‘qualia’ to pick out some feature of experience that is not its phenomenal character, then, there is good reason to think she is not talking about qualia.

Focusing on that aspect of the qualia debate centered on the question \textit{are qualia intentional properties of experience}, philosophers can be divided into two camps. There are those who answer this question in the affirmative—the representationalists (or intentionalists). Moreover, there are those who answer in the negative—qualia realists (or phenomenalists). Representationalists hold that an experience’s phenomenal character is a matter of its having a certain sort of representational content. Qualia realists hold that the phenomenal character is distinct from a state’s having any representational content—qualia are non-intentional (or non-representational) properties of experience.

Traditionally, the qualia realist position has been supported by inverted spectrum-type arguments. Simply put, if it is possible for two experiences of the same perceptual object to be intentionally the same and phenomenally different, and yet neither experience misrepresents the perceptual object, then the phenomenal character of the experience is distinct from its representational features. Qualia are not representational properties of experience.

Representationalists deny this conclusion so they are sometimes characterized as holding a view of the phenomenal character of experience that is inconsistent with the possibility of spectrum inversion. Since the phenomenal character of experience is just a matter of its having a certain sort of representational content, experiences that differ in their phenomenal character will differ in their representational features as well.

By distinguishing between \textit{objective} properties and (a certain sort of) \textit{subjective} properties represented in experience, Shoemaker defends a representationalist view of phenomenal character that he characterizes as being consistent with the possibility of spectrum inversion [22, 20, 21, 19]. He suggests that two experiences may represent the same objective properties of objects (and thus neither misrepresents the object), but at the same time, the two experiences may represent the object as having different \textit{phenomenal} or \textit{appearance} properties.

\textsuperscript{1}If we “get” this much about what ‘qualia’ refers to, then this feature of experience is in some way accessible to us. Again, without adopting any particular theory of either qualia or introspection, we should agree that qualia are introspectible. If qualia are the phenomenal character of experience, and that is something known by introspection, then qualia are known by introspection.
According to Shoemaker, phenomenal properties are a certain sort (either dispositional or occurrent) of appearance property that objects have in virtue of being disposed to appear (or be currently appearing) to a subject in a certain way. In short, he says we should think such properties play a role in experience since, for example, there is a **way** that red things can look, apart from their looking **red**. If looking red is a matter of a subject representing the objective color property of **being red**, then, because the way red things look can vary independently of their looking red, looking red is a matter of representing objects as having certain subjective appearance properties. Experience having the phenomenal character it does is a matter of its representing certain appearance properties of objects—the property of **appearing** red. Because two experiences can represent the same objective properties of objects and have different phenomenal character in virtue of representing different phenomenal or appearance properties, this representationalist account of phenomenal character would seem to be consistent with the possibility of spectrum inversion. Or so Shoemaker claims.

What is worrisome about the inversion story Shoemaker tells here is that it hardly captures the qualia realist’s objective in positing the thought experiment. Traditionally construed, it is supposed to be conceivable that phenomenal character varies independently of **any** representational features of experience. Full stop. Whether experience is representing objective properties or phenomenal properties, it is still representational. Moreover, if phenomenal character is a matter of experience representing certain phenomenal properties, as Shoemaker claims, then a difference in phenomenal character will still be a representational difference.

Shoemaker insists that not only is his view of phenomenal character representationalist, and “untraditional” in that it allows for spectrum inversion of the sort just described, but that unlike traditional representationalism, it allows an essential role for qualia. While Shoemaker has a rather complicated story of how exactly qualia are supposed to fit into the picture, it is sufficient for my purposes here to say that his qualia are hardly qualia in the traditional qualia-realist sense. For, if the most basic characterization of qualia is that they are an experience’s phenomenal character, then qualia in Shoemaker’s sense would either have to be the representation of certain phenomenal properties, in which case they are still representational; or they are not the experience’s phenomenal character, in which case they are not qualia in the most basic understanding of ‘qualia’. While Shoemaker assigns an essential role to what
he calls ‘qualia’, I must leave that aside here in order to focus on the sense in which representationalism is consistent with the possibility of spectrum inversion.

While we should not say that Shoemaker’s version of representationalism allows for the possibility of spectrum inversion, we could say, instead, that here we have a representationalist account of our intuitions about the possibility of spectrum inversion. No representationalist thinks that phenomenal character can vary independently of an experience’s representational features precisely because representationalism is the view that phenomenal character is a representational property of experience. In this respect, there is no “middle ground” between representationalism and qualia realism. Either the phenomenal character of experience is a representational property of experience or it is not. Since Shoemaker characterizes phenomenal character as a matter of representing phenomenal properties, he is a representationalist. Moreover, while he assigns an essential role to qualia, because it is not one of being an experience’s phenomenal character, they hardly seem to fall under our pre-theoretic grasp of what qualia are.

It may be the case that one would want to distinguish two versions of qualia realism—one that holds that qualia are (identical to) phenomenal character, and another that holds that qualia determine phenomenal character. I have reason to think that the qualia realist must hold the former position in order to distinguish her view from representationalism. As far as I understand it, what is supposed to distinguish qualia from other non-intentional properties (e.g. neurological properties) is that they constitute an experience’s phenomenal character (and perhaps they are also unique in that they are introspectible non-intentional properties). It is consistent with representationalism that some non-intentional properties determine phenomenal character, but so long as these determining properties are not the experience’s phenomenal character (and not introspectible), they are not qualia in the qualia realist’s sense.

What I here want to do is tell a different story about what goes on in cases of supposed spectrum inversion. A story that is, like Shoemaker’s view, consistent with representationalism, but that, unlike Shoemaker’s, does not require the introduction of phenomenal properties (or qualia).

Before proceeding, it should be mentioned that, while representationalists agree that there are no qualia (understood as non-intentional phenomenal character), they are not in agreement as to exactly what the relation is between phenomenal character and intentional properties of
experience. Nor is it entirely clear which intentional properties representationalists would assign the role of being an experience’s phenomenal character. Consider what Alex Byrne has said by way of introducing representationalism.

“. . . there is a basic claim that all these [representationalists—Dretske, Tye, and Lycan,] wish to defend. It is that the propositional content of perceptual experiences in a particular modality (for example, vision) determines their phenomenal character. In other words, there can be no difference in phenomenal character without difference in content.” [1, p. 204]

This characterization of the representationalist view rather oversimplifies the nature of agreement among representationalists since it is not even clear that those Byrne mentions would agree that content of phenomenal experience needs to be propositional. Moreover, while it may be the case that they agree that a supervenience relation holds between an experience’s content and its phenomenal character, an experience’s content does not exhaust its intentional properties. What I have in mind here is the property of being contentful. This is a distinct intentional property of experience—one that is frequently overlooked in characterizations of the representationalist view of phenomenal character. More often than not, descriptions of this view emphasize the role of the content of experience. Needless to say an experience’s content plays an essential role in its being contentful but failure to distinguish these two properties of experience has caused problems for representationalism.3

Thus I appeal to the following version of representationalism to provide a plausible account of the phenomenal character of experience under the caveat that representationalists are unlikely to agree with some of the finer details of the account. The version I have in mind is Dretske’s.4 I will briefly describe this representationalist view of phenomenal character and how it might accommodate inversion-type cases more “economically” than Shoemaker’s does.

According to this account, a plausible candidate for being experience’s phenomenal character is the experience’s being a property-aware-

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2Byrne goes on to say that characterizing intentionalism in terms of determination is to express it in terms of supervenience.
3A recent exception is [3].
4Dretske esp. [6, 7, 8], but also Tye esp. [25, 24, 26]. Other intentionalist views of phenomenal character include, inter alia, Lycan [10, 11], Byrne [1], Ross [18], and Harman [9].
ness. That is, the phenomenal character of an experience is constituted by that experience being an awareness of some property, p.\(^5\) For instance, the phenomenal character of seeing a black cat, the *something that it is like* to see a black cat, is its being, in Dretske’s terminology, a property-awareness of the cat’s blackness. The property of experience, its being “of-black” is an intentional, or representational, property of it. Take away the experience’s “of-blackness” and you take away the experience’s phenomenal character. The phenomenal character of an experience is a matter of its *having* a certain intentional content. It is an intentional property of the experience.

Here it is important to distinguish the property of being black from the property of being of-black. I take it that the former is a property of objects of experience while the latter is a property of experience.\(^6\) It is in virtue of being an awareness of properties, being a *property-awareness* that experience has the phenomenal character it does. The properties of which we are perceptually aware, the cat’s blackness, are not the experience’s phenomenal character.\(^7\) Moreover, in being “of-black” there is no sense in which experience itself has the property of being “black”.\(^8\)

The content of an experience that determines its phenomenal character has been described (by Tye) as non-conceptual (among other things) \([26]\).\(^9\) The issue of non-conceptual content is a highly contentious one.

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\(^5\)It has been suggested to me that we ought not to equate experience and awareness for the following reason: Awareness is commonly thought to be a type of knowledge, and experience is not. However, I am employing Dretske’s terminology. Experience should be thought of as awareness-of (non-epistemic awareness). Awareness-that (epistemic awareness), on the other hand, might be thought of as belief. Therefore when I talk of experience, I have in mind awareness-of, not awareness-that.

\(^6\)It is on phenomenological grounds that I hold that so-called secondary qualities are properties of objects. This has become standard operating procedure in order to bracket a family of problems concerning the nature of secondary qualities.

\(^7\)Thus, this view is easily distinguished from projectivism.

\(^8\)Of course, it is a further question what role “black” plays in “of-black”; that is, there is a question about the nature of representational content. I will need to set this issue aside here. To make this distinction clear, Dretske \([8]\) describes experiences as *exhibiting* properties rather than *having* them. We might just as well say the experience has the property of exhibiting (representing) a property. So, for example, my experience of seeing black has the property of exhibiting (representing) black. My experience does not have the property of being black. This distinguishes this view from a sense data theory of perceptual experience, and it will help explain the phenomenal character of hallucinations and illusions.

\(^9\)In addition, it is because of this that he describes his view of phenomenal character as representational rather than intentional—the latter tends to imply that the content of the states be propositions and thus to employ concepts. I’ve been using ‘intentional’ and ‘representational’ interchangeably; still, I do not want to imply that
that I cannot pursue here [5, 4, 23, 13, 16, 17, 14, 15]. Still, there does seem to be at least *prima facie* reason to think that the phenomenal content of experience is non-conceptual. Property-awareness, i.e., “simply seeing” $p$, is possible without having the concept of $p$. That is, one can simply see a black cat, be aware of the black cat (object- and property-aware) without having the concepts CAT or BLACK. Where concept possession does seem required is for fact-awareness. One cannot (directly) see *that* the cat is black unless one has the concepts CAT and BLACK (and one is aware of the black cat).¹⁰

The idea here is that the property of experience in virtue of which the experience has phenomenal character is constituted by its having a certain sort of content. Of course, this is not to say that concepts (or concept possession) do not play a role perceptual experience; it is just to say that object- and property-awareness are not dependent upon the possession of these particular concepts ($o$ and $p$).

The representationalist wants to provide an account of the phenomenal difference between two subjects in the inversion case without positing qualia. Shoemaker does this by drawing a distinction between objective properties and phenomenal (or appearance) properties. However, still working within the framework of Dretske’s representationalism, the distinction between fact-awareness and property-awareness as well as that between direct and indirect fact-awareness will meet this challenge without positing phenomenal properties.

In the standard construal of the thought experiment, our two subjects Jack and Jill are both having an experience that represents the same red thing and yet their experiences are phenomenally different. If Jill is phenomenally inverted with respect to Jack, then while both Jack and Jill represent some red thing, Jack’s experience has the phenomenal character normal perceivers typically have when seeing red things while Jill’s experience has the phenomenal character normal perceivers typically have when seeing green things. We are supposed to draw the conclusion that, because their experiences are representationally the same and phenomenally different, the phenomenal character of their experiences is

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¹⁰I am taking fact-awareness to be a form of belief. It will count as perceptual belief only if it is direct fact awareness, that is, only if one is fact-aware that $o$ is $p$ in virtue of being object- and property-aware of $o$ and $p$. (How the phenomenal content of mental states gets subsumed under concepts will be a matter of introspection, for example, it may require employing (something like) phenomenal concepts in introspection.)
not a representational (or intentional) property of their experience. The phenomenal character is a non-intentional property, a so-called quale.

Shoemaker’s explanation of the phenomenal difference between Jack and Jill depends on their representing different phenomenal properties. However, on the representationalist account of phenomenal character I have been considering here, we can explain this phenomenal difference without positing either qualia or phenomenal properties. The phenomenal character of these subjects’ experiences is a property their experiences have in virtue of being property-awarenesses. So how could the phenomenal character of their experiences differ when both are having an experience of the same red thing? Following Shoemaker, let us assume that colors are objective properties of objects. If Jill is aware of green and Jack is aware of red, then in some sense one of them is misrepresenting the object.\textsuperscript{11} Let us suppose that, as a result of being inverted, Jill’s representations are not veridical. In the presence of red, she represents green. In representing green, her experience has the property of being ‘of-green’ and since this is the phenomenal character of her experience, the phenomenal character of her experience differs from Jack’s who is aware of red.

Of course, the thought experiment starts from the assumption that both Jack and Jill are having “red-representing”\textsuperscript{12} experiences—that they are intentionally the same in this respect—and that neither is misrepresenting the object of perception. However, ‘having a red-representing experience’ is ambiguous between ‘being aware of red’ and ‘being aware that something is red’. What is similar between the two subjects’ experiences is usually characterized as a functional similarity. It is supposed that both Jack and Jill call the tomato “red,” they both believe that the tomato is red, they can distinguish between the red tomato and green tomatoes, etc. The best explanation of this functional similarity is that both Jack and Jill are aware that the tomato is red. But it does not follow from this that they are both aware of red. Here, Jill’s fact-awareness could be either indirect (and) or illusory. If she is property-aware of green and the tomato is not green, then her experience is illusory. Were she to be directly fact-aware, she would be fact-aware that the tomato is green. Since she is instead fact-aware that the tomato is red, we should

\textsuperscript{11}This is a standard sort of representationalist response and one I take Shoemaker as trying to avoid by appealing to phenomenal properties. At least on phenomenological grounds, I do not see the problem with saying the inverted subject is misrepresenting the object in some way. I will tell a more precise story about this presently.

\textsuperscript{12}The “x-representing” and “x-feeling” terminology comes from Byrne and Hilbert [2].
say she has an indirect belief (if she believes that the tomato is red on the basis of being aware of green) that is unjustified (however one wants to cash this out, e.g., not formed in a reliable way, etc.). On the other hand, she may be fact-aware that the tomato is red, not in virtue of being property-aware of its redness (but perhaps having learned to call such property-awarenesses (property-awareness of green) “red”, in which case her fact-awareness is indirect. Indirect fact-awareness (that o is p) does not involve a property-awareness of p, and so it does not have the phenomenal character being of-p.

Our intuitions about inversion, then, can be explained by supposing that it is possible for two experiences to be the same qua fact-awarenesses, and phenomenally different qua property-awarenesses. The sense in which neither subject misrepresents the object of perception is satisfied by the fact-awareness—they are both aware that the tomato is red and the tomato is in fact red. And, while one subject is aware of green and the other is aware of red, property-awareness need not go along with either fact-awareness or object-awareness.

So, in the inverted spectrum case, Jack and Jill may indeed have similar fact-awarenesses (for they are both aware that the tomato is red). The phenomenal difference between them can be explained by the fact that Jack’s is a direct fact-awareness because he is property-aware of red, while Jill’s is either indirect—she is property-aware of green—or direct but unjustified (that is, while it is true that the object is red, she comes to believe this on the basis of being aware of green, not red). What is essential here is that the phenomenal difference just is an intensional difference. They are each aware of different properties, thus their experiences have a different phenomenal character. Thus, contrary to what the qualia realist would have us think, if two experiences differ in phenomenal character, they differ representationally in some respect (though it need not be that they differ in every respect). Moreover, here we have an account of phenomenal inversion that posits neither qualia nor phenomenal properties.

This account nicely accommodates the distinction between “the way red things look,” which Shoemaker has described as a subjective property of objects, and “being red,” which he takes to be an objective property of objects, without appealing to appearance properties. Shoemaker describes a case of color constancy: Different parts of a table of a uniform color look different due to a shadow cast on one part and not the other. While the two parts look (phenomenally) different, they do not look to be different colors. Thus, he suggests that the two parts, while having
the same objective color property (red), differ in their appearance properties (how they appear to a subject). He says it is not the case that two parts look different because it looks that they have different objective properties. Instead, it looks as if they have different objective properties because they look different. He explains that

“Of course, it may look to me as if the one part has, while the other part lacks, the objective property if being in the shadow. But it would get things backwards if we said that it is because of this that the two parts look different to me. Things can look different to one in the way these parts do when one is in doubt whether this is due to a difference in color or a difference in illumination, and if in the present case one part looks to be in the shadow and the other doesn’t, this is partly because they look different in the way they do (and partly because of clues about illumination provided by the context).” [22, p. 253]

However, it hardly seems to be the case that the two parts would look different because it looks as if one is shadowed and the other is not. More plausibly, it would seem they look different because one is in the shadow and the other is not.

Suppose one judges that (or directly sees that) the different parts of the table are different in virtue of being aware of each of these parts of the table. Being red and being illuminated in a certain way are not incompatible properties. One can be aware of both. One can be aware of these properties without ever being aware that the table instantiates them or that they differ. And, it is in virtue of being aware of these properties, not being aware that the table has them, that experience has the phenomenal character it does. One can be aware of their differences without being aware that they differ [8].

While the different parts of the table may indeed have different appearance properties, they have them only in virtue of some experience representing them to have different objective properties. One does not perceive the look of things (appearance properties), one perceives objects and their properties.13 We come to know how things look to us, what properties we represent them as having, by introspecting that our

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13Here I must avoid a potentially lively debate about which comes first—property-awareness or object-awareness. That is, whether we are (in veridical perception) aware of objects in virtue of being aware of their properties, or vice versa. I am inclined to think, following Dretske, that these sorts of awarenesses come apart and that this nicely accounts for cases of illusion and hallucination. Illusory experience
experience represents the objects as having certain properties, not by *perceiving* objects. Phenomenal character is a feature of perceptual experience, and it is not a feature of introspection. We come to know the phenomenal character of experience, *that* we are aware of certain objective properties, introspectively.

Consider a painting of a table where different color paints are used to represent shadows on the table. Here the (representation of the) table is not uniform in color, but one might judge that it is. That is, one might believe that the artist meant to depict a red table despite the fact that she has used both brown and red paint. One is not aware of a uniform expanse of red because there is not one. Instead, there are splotches of red and splotches of brown. The different parts of the table represented seem different because they are different. If one judges that the table is a uniform shade of red, one does so *indirectly* (not on the basis of being aware of a uniform shade of red, but on the basis of being aware of the different colors the artist used to represent the table and having certain background beliefs about how different paints are used to represent illumination).

Now what of perceiving a real table that is partially shadowed? One can see *that* it is a uniform shade of red directly, because it is, and one is aware of this property of the table. But it can still seem that different parts of the table differ. Whatever the difference is, it will be distinct from the objective *color* (red) of the table, but it does not follow from this that the difference should be attributed to the table having different subjective properties. If we suppose that the experience is veridical, then there is some objective difference in virtue of which one can see that the parts differ. The difference between them is not that they *look* different, but they look different because they are different. If they are not different, but they look different, then one is in some way misrepresenting the table as having differences it does not have. The two parts of the table will look different, that is, they will be represented as having different objective properties, if they are different and one is perceptually sensitive to these sorts of differences; or, they will look

might be described as object-awareness without the “right” property-awareness, and hallucinatory experience is property-awareness without object-awareness. But this only introduces problems concerning the nature of intentional contents that I am not prepared to take up here.

Given that I take the phenomenal character of experience to be a matter of its being a property-awareness, introspection lacks phenomenal character because it does not involve property-awareness. To think otherwise is to commit oneself to a perceptual model of introspection. See Shoemaker [19] for reasons to avoid this view of introspection.
different if they are misrepresented as having different properties they do not in fact have.

Whether one knows (or doubts, as Shoemaker suggests) what objective properties account for their looking different is distinct from their looking different. One can be aware of properties of the two parts that differ (and thus they (phenomenally) look different) apart from perceiving that they are different. Moreover, one can believe that they are not different in color even if one believes that they look different in some other respect. However, all this shows is that we draw a conceptual distinction between the color of a thing and its being illuminated in a certain way. And, this occurs at the level of fact-awareness, not property-awareness.

It is useful to remember to distinguish between the properties of things we experience and properties of the experience of things [12]. It is strange to describe objects as having appearance properties, for example, the property of being represented by some subject as red (not unlike the property of being believed by Lois to be a flyer), when we are not so much concerned with red things (the objects of perception) as we are with the experience of red things. Experience has the phenomenal character it does because it represents the world as having certain properties. If experience is veridical, then these are objective properties of objects; and if it is illusory, the object in question does not instantiate these properties. However, this does not mean that the properties the awareness of which constitutes an experience’s phenomenal character are subjective properties of the object. We are not aware of the way things look to us in perception, but we are aware of objects and their properties. An awareness of the way things look, that is, an awareness that experience represents things as having certain properties, is a matter of introspection.

If representationalism is true, then if two experiences differ in their phenomenal character then they will differ representationally (in some respect). While Shoemaker attributes the phenomenal difference in inversion-type cases as in terms of experiences representing different phenomenal properties, I think we can accommodate these sorts of cases without appealing to phenomenal properties. Two experiences can be representationally the same qua fact-awarenesses and still differ qua properties-awarenesses. Moreover, since phenomenal character is a matter of being a property-awareness, these experiences will differ in phenomenal character. We do not perceive how things look to us, the look of things, or appearance properties; we simply perceive objects and their
properties. The look of things is a matter of our representing them to have certain objective properties, and we know this by means of introspection, not perception.
References


