

## Do We Conceptualize Every Color We Consciously Discriminate?

Jacob Berger  
Philosophy Program  
Graduate Center, City University of New York  
365 Fifth Avenue  
New York, NY 10016  
[jfberger@gmail.com](mailto:jfberger@gmail.com)

Published in *Consciousness and Cognition* 21(2): 632-635.

**Key words:** color; concepts; conceptualism; consciousness

**Abstract:** Pete Mandik understands color-consciousness conceptualism to be the view that one deploys in a conscious qualitative state concepts for every color consciously discriminated by that state. Some argue that the experimental evidence that we can consciously discriminate barely distinct hues that are presented together but cannot do so when those hues are presented in short succession suggests that we can consciously discriminate colors that we do not conceptualize. Mandik maintains, however, that this evidence is consistent with our deploying a variety of nondemonstrative concepts for those colors and so does not pose a threat to conceptualism. But even if Mandik has shown that we deploy such concepts in these experimental conditions, there are cases of conscious states that discriminate colors but do not involve concepts of those colors. Mandik's arguments sustain only a theory in the vicinity of conceptualism: The view that we possess concepts for every color we can discriminate consciously, but need not deploy those concepts in every conscious act of color discrimination.

### 1. Introduction

Pete Mandik (2011) understands color-consciousness conceptualism ("conceptualism") to be the view that one deploys in a conscious qualitative state concepts for every color that is consciously discriminated by that state. If one consciously perceives that there is a red square, conceptualism holds that that one conceptualizes the square's color by deploying a concept such as RED in that conscious perception. Though conceptualism is usually understood as denying that conscious states exhibit mental aspects that are not concepts, such as mental qualities, Mandik grants that conceptualism is compatible conscious states' exhibiting mental qualities as long as concepts are also deployed for every color consciously discriminated by those states.

Since one cannot deploy concepts one does not possess, most debates about conceptualism concern whether we possess the relevant color concepts. Opponents of conceptualism often observe that we lack or at least do not frequently use individual words such as 'vermillion' for many colors we can consciously discriminate, a fact which suggests that we do not possess the corresponding concepts of those colors (Evans, 1982). And conceptualists typically reply that we deploy demonstrative concepts such as THAT SHADE OF RED for many colors (Brewer, 1999). Mandik's goal is to defend

conceptualism from an argument based on psychological evidence regarding our capacities to discriminate colors, evidence which also arguably shows that we do not possess the relevant color concepts.

I'll begin in Section 2 by discussing this argument against conceptualism and Mandik's response to it. Mandik argues that a version of what he calls nondemonstrative conceptualism is consistent with the evidence about our capacities to discriminate colors. I'll then argue in Section 3 that, even if one grants that we do possess the relevant concepts or that we do conceptualize the colors under these experimental conditions, Mandik has not established conceptualism. Since Mandik acknowledges that it is not his goal to argue for his particular version of conceptualism, he may not dispute this point.

But conceptualism cannot be established. Even though I think that conscious color perception always involves some conceptualization of what is perceived, I'll argue that there are examples of what I will call conscious perceptual sensations of colors, which are states that consciously discriminate colors but that do not exhibit color concepts. I'll then explore and reject in Section 4 some potential reasons to think that conscious perceptual sensations do not exist. I'll briefly conclude in Section 5 that Mandik's arguments sustain only a theory in the vicinity of conceptualism: The view that we possess concepts for every color we discriminate consciously, but need not deploy those concepts in every conscious act of color discrimination.

## **2. Mandik's version of conceptualism**

Mandik's main aim is to defend conceptualism from an argument that he calls the diachronic indistinguishability argument (Raffman, 1995), which relies on the psychological evidence that people are capable of consciously discriminating barely distinct hues when they are presented together, but cannot distinguish them when they are presented one at a time in short succession. Many take the inability to distinguish the barely distinct hues presented sequentially as evidence that the first hue is not remembered across the short interval between the first and second hues. And since Mandik claims that it is reasonable to assume that people remember conceptualized stimuli at least over short time intervals,<sup>i</sup> it would seem people do not conceptualize the first hue. Since people do discriminate those hues when they are presented simultaneously, many conclude that people consciously discriminate colors that they do not conceptualize.

Mandik's response to this argument relies on his observation that people enjoy a variety of nondemonstrative color concepts. Mandik agrees with the opponent of conceptualism that the number of consciously discriminable colors outstrips our limited repertoire of lexical color concepts (e.g., RED or BLUE), but maintains that people also possess many phrasal color concepts (e.g., LIGHT BLUE or ORANGEY RED) and comparative color concepts (e.g., A SHADE OF RED MORE ORANGE THAN RED or A SHADE OF BLUE DARKER THAN THE SHADE TO THE RIGHT). If people enjoy this variety of concepts, then they may possess nondemonstrative concepts for every consciously discriminable color.

Mandik therefore proposes what he calls nondemonstrative conceptualism, according to which one deploys nondemonstrative concepts in a conscious qualitative state for every color that is consciously discriminated by that state. And Mandik argues

that this version of conceptualism is compatible with the evidence that figures in the diachronic indistinguishability argument. When the hues are presented simultaneously, Mandik hypothesizes that people deploy nondemonstrative comparative concepts, such as TWO SHADES OF LIGHT BLUE, THE SHADE ON THE LEFT DARKER THAN THE SHADE ON THE RIGHT, which enables them to successfully discriminate the hues. When the hues are presented in succession, by contrast, Mandik claims people deploy the same nondemonstrative concept, such as LIGHT BLUE, for both hues. Since the concept deployed in both perceptions of the hues presented in succession characterizes a range of colors that applies to both hues, the perceptions are subjectively indistinguishable, which explains why people fail to discriminate the hues.

### **3. Do we conceptualize every color we consciously discriminate?**

But Mandik's arguments do not establish conceptualism. Mandik presents an inference to an explanation of this particular set of psychological data, but he has not shown that it is an inference to the best explanation of conscious color discrimination in general. Mandik has not refuted the alternative hypotheses that we may possess the relevant concepts but do not always deploy them or that we lack the relevant concepts altogether. It is not clear, moreover, what experimental evidence could distinguish between these competing views.

Perhaps it's inviting to see our possessing the relevant color concepts as evidence that we always deploy them in the conscious states that discriminate the colors. And Mandik provides some reason to think that we do possess these concepts. The complex color concepts that he posits seem to involve simple concepts such as BLUE, LIGHT, and DARKER THAN, which it's reasonable to hold that we do possess. Because Mandik follows Jerry Fodor's (1975) proposal that we can combine the simple concepts we possess into complex concepts, he concludes we can form a vast array of phrasal and comparative color concepts out of these simple concepts.

But whether or not Mandik has succeeded in showing that we possess every relevant color concept, conceptualism does not follow. Mandik must also show that we deploy such concepts in every act of color discrimination. It cannot be disputed, moreover, that one need not deploy in perception all of the potentially appropriate concepts that one possesses for everything one consciously perceives. One may conceptualize something that is cherry red as the color of cherries, but one might also conceptualize it simply as red or as one's favorite color, although one does possess the concept CHERRY RED.

And there is evidence that we do not deploy in perception every relevant concept we possess. For instance, Eleanor Rosch and colleagues (1976) found that people are faster at identifying an outline of an object as a car than they are at categorizing it as a sports car or as a vehicle. This suggests that people may be faster at deploying midrange-level concepts such as CAR in perception than lower-level concepts such as VEHICLE or higher-level concepts such as SPORTS CAR, though people possess the concepts at each level. Another reading of this data is that people only deploy midrange-level concepts in perception and then make inferences to beliefs involving concepts at the other levels.<sup>ii</sup>

Furthermore, even if one grants that people deploy color concepts in the states in the experimental conditions considered by Mandik, it still does not follow that we deploy

such concepts in every act of color discrimination. Perceptions always do involve some conceptualization of what is perceived. But I argue that there are examples of conscious perceptual sensations of colors, which are states that discriminate colors yet arguably do not deploy any concepts of those colors. Consider, for instance, one's conscious state upon awakening from sleep. It sometimes happens that one consciously senses some color such as red, even if there isn't anything red around that one is sensing. In the confusion that often accompanies awakening, one may not have the time or wherewithal to focus on or think about the redness. There is simply a flash of red, as it were, before one's eyes.

Such a conscious perceptual sensation of red is crucially different from a perception that there is something red, which represents that something is the case, thereby conceptualizing red. The fact that the perception exhibits conceptual content explains why we can, for instance, describe its content as being true or false. Conscious perceptual sensations, by contrast, do not represent anything sententially--that is, they do not represent that anything is the case--which explains why we do not characterize the sensation or its properties as being true or false. A sensation of red is of red, but does not conceptualize anything that is being sensed, including the color red.

The opponent of conceptualism, but not the conceptualist, is able to explain such conscious perceptual sensations. According to a standard alternative to conceptualism, conscious perceptions and sensations of colors exhibit aspects that are not concepts, such as mental qualities of color. For ease, I'll refer to the colors that objects exhibit as perceptible colors and refer to the corresponding mental qualities that mental states exhibit as mental colors.<sup>iii</sup> For example, a conscious perceptual sensation of perceptible red is a state that exhibits mental red, but does not deploy any concept of perceptible red.<sup>iv</sup> It may be that such states are rare, but if they exist then conceptualism is false.

#### **4. Are there reasons to deny there are conscious sensations of colors?**

Mandik discusses several motivations for conceptualism, which may provide some reason to deny there are conscious perceptual sensations as I have characterized them. I'll focus on what I see as two of the main motivations. Most assume that the states in virtue of which we discriminate the colors explain or justify the beliefs about the colors that one forms on the basis of those qualitative states. And, as Mandik notes, many think that the states involved in discriminating the colors could explain or justify states such as color beliefs, which involve concepts of those colors, only if those states also involve concepts of the colors (McDowell, 1994).

But there are reasons to think that sensations can enter into the relevant explanatory relations with conceptual states such as beliefs, even if sensations do not exhibit concepts. First, there's a commonsense way in which sensations represent colors, but do so unlike the way in which thoughts or conceptual representations represent things. A sensation of perceptible red arguably represents the presence of perceptible red in virtue of exhibiting mental red, and so represents red in a different way than do the thoughts or perceptions involving the concept RED (Rosenthal, 2005, p. 208). One might deny, however, that mental qualities of color represent colors because one might believe that it is at least conceivable that mental qualities can be undetectably inverted (Block, 1990). But even if one denies that mental qualities represent perceptible properties, most agree that a mental quality is reliably caused by

its corresponding perceptible property. And if a sensation of red is reliably caused by red, it's arguable that repeated sensations of red will cause one to form the disposition to believe that there is something red when one senses red. Whether mental qualities of color represent perceptible colors or are merely reliably caused by them, there is herein the beginning of an explanation of how conscious sensations of colors explain beliefs about those colors.

Another reason why one might doubt that conscious perceptual sensations exist is suggested in Mandik's claim that certain theories of consciousness seem to entail conceptualism. For example, according to David Rosenthal's version of the higher-order thought ("HOT") theory of consciousness, a mental state is conscious only if one is conscious of that state via a suitable HOT (Rosenthal, 2005). And, Mandik argues,

[T]o be conscious of one's perception as being of some color shade, one must have a suitable higher-order thought of that shade, which in turn requires that one have the conceptual resources needed to capture that color (2011, p. xxx).

It might seem that, if one were to adopt HOT theory, one is also committed to conceptualism. But this does not follow. HOT theory holds that a conscious state is a state one is conscious of, and not the state in virtue of which one is conscious of that state. Indeed, Rosenthal claims that HOTs themselves are seldom conscious, though they are responsible for other states' being conscious. So even if one's HOT involves concepts of colors, one's conscious state need not involve those concepts.

Moreover, it is compatible with HOT theory that there are conscious sensations of colors that do not involve concepts of those colors at all. Rosenthal maintains that conscious sensations themselves exhibit mental qualities only and the concepts that figure in the HOTs are concepts of the sensations' mental qualities, not concepts of colors. If one consciously senses red, the conscious sensation exhibits mental red only and the concept MENTAL RED that figures in one's HOT conceptualizes that mental quality; the HOT does not deploy RED, which conceptualizes perceptible red.<sup>v</sup> Instead of providing motivation for conceptualism, HOT theory treats examples such as the conscious sensation of red upon awakening as conscious states that discriminate the colors but do not involve color concepts at all.

## 5. Conclusions

If Mandik is right that we possess the kinds of nondemonstrative concepts of the colors that he posits, his arguments support a theory in the vicinity of conceptualism which may be correct--namely, the view that we possess concepts for every color we can discriminate consciously, though we need not deploy those concepts in every conscious act of color discrimination.<sup>vi</sup> Whether this alternative theory can meet all of the desiderata conceptualism is designed to meet is, however, beyond the scope of this discussion.

## Acknowledgements

I'd like to thank Pete Mandik, Myrto Mylopoulos, David Pereploychik, and David Rosenthal for their helpful discussions of this material and comments on drafts of this commentary.

## References

- Block, N. (1990). Inverted earth. *Philosophical Perspectives*, 4, 53-79.
- Brewer, B. (1999). *Perception and reason*. Oxford: Oxford University Press.
- Evans, G. (1982). *The varieties of reference*. Oxford: Oxford University Press.
- Fodor, J. (1975). *The language of thought*. Cambridge, MA: Harvard University Press.
- Mandik, P. (2011). Color-consciousness conceptualism. *Consciousness and Cognition*, doi:10.1016/j.concog.2010.11.010.
- McDowell, J. (1994). *Mind and world*. Cambridge, MA: Harvard University Press.
- Moore, G. E. (1942). A reply to my critics. In P. A. Schilpp (Ed.), *The philosophy of G. E. Moore* (pp. 535-677), La Salle, IL: Open Court.
- Peacocke, C. (1983). *Sense and content*. Oxford: Clarendon Press.
- Raffman, D. (1995). On the persistence of phenomenology. In T. Metzinger (Ed.), *Conscious experience* (pp. 293-308). Exeter, UK: Imprint Academic.
- Reid, T. (1969). *Essays on the intellectual powers of man*. B. A. Brody (Ed.), Cambridge, MA: MIT Press.
- Rosch, E., Mervis, C. B., Gray, W. D., Johnson, D. M., & Braem, P. B. (1976). Basic objects in natural categories. *Cognitive Psychology*, 8(3), 382-439.
- Rosenthal, D. M. (2005). *Consciousness and mind*. Oxford: Clarendon Press.
- Strawson, P. F. (1979). Perception and its objects. In G. Macdonald (Ed.), *Perception and identity: Essays presented to A.J. Ayer with his replies* (pp. 41-60). Ithaca, NY: Cornell University Press.

---

<sup>i</sup> Mandik unfortunately does not go into detail about why it's reasonable to hold that people remember conceptualized stimuli over short time intervals, and I do not see the basis for it. But whether or not the generalization is true is irrelevant because Mandik thinks conceptualism is in either case not undermined by the psychological evidence about our discriminatory capacities.

<sup>ii</sup> I acknowledge that Rosch's evidence does not rule out the possibility that one nonetheless deploys at least some concept for everything perceptually discriminated.

<sup>iii</sup> Many theorists distinguish the perceptible properties of objects from their corresponding mental qualities and note that the words for the perceptible properties such as 'red' ambiguously refer both to those perceptible properties and the corresponding mental qualities (Moore, 1942; Reid, 1969; Peacocke, 1983, Rosenthal, 2005). Thomas Reid, for instance, writes that "[a]ll the names we have for smells, tastes, sounds, and for the various degrees of heat and cold, have a like ambiguity.... They signify both a sensation, and a quality [in physical objects] perceived by means of that sensation" (Reid, 1969, p. 244, quoted in Rosenthal, 2005, p. 140).

<sup>iv</sup> The following references to colors refer to the perceptible colors unless otherwise specified.

<sup>v</sup> Mandik has objected that the concepts of mental qualities may involve concepts of the colors to which those qualities correspond (personal communication). P. F. Strawson (1979, p. 44) makes a similar point when he claims that we cannot characterize the properties of our conscious perceptions without making reference to the properties of

---

the external objects those perceptions represent. Perhaps, then, the concept MENTAL RED is shorthand for a complex concept such as THE PROPERTY OF A SENSATION THAT REPRESENTS RED, so deploying the former in a state entails that one also deploys the latter in that state too. But this is not obvious. The concept SQUARE may somehow involve the concept SHAPE, but it's doubtful that one deploys the latter each time one deploys the former. And, again, even if one deploys in one's HOT a concept of a mental quality and that concept involves a concept of the color, HOT theory holds that the conscious sensation itself does not thereby involve that color concept.

<sup>vi</sup> And Rosenthal can be read as holding this view. Rosenthal claims that to acquire a concept of a mental quality that can be deployed in HOTs involved in conscious perceptions and sensations, one must first possess the concept of the corresponding color (Rosenthal, 2005, pp. 218-219).