Descartes on Color Eliminativism and Color Representation

Abstract
It is widely accepted that Descartes is an eliminativist about colors in bodies. As the story goes, Descartes expels color from the mechanistic realm of extension, transferring them into the immaterial mind where they enjoy secondary quality status through being instantiated in sensations. In this paper I argue that Descartes’ color eliminativism is much more radical. I engage an oft-neglected passage from Descartes’ *Conversation with Burman* to show that Descartes’ fundamental position on the status of color is that colors are not properties. This implies that colors are completely uninstantiated – they aren’t properties of physical or mental substance. So then what explains our experience of color? I show that Descartes can account for color representation – without granting color any ontological status – by reducing it to various facts about our sensory and innate mental faculties.

1. Introduction
In his 1648 *Conversation with Burman*, Descartes makes an intriguing claim about color in a clarificatory response to Frans Burman’s interpretation of the account of error adumbrated in the Third Meditation. In that part of the meditation, Descartes presents a taxonomy of various forms of thought, and during his explanation of judgment he makes some preliminary remarks about the nature of falsity. He explains that ideas “considered solely in themselves [in se]” are not false; rather it’s judgments about ideas that can be false (AT VII: 37/CSM II: 26). As detailed in the Fourth Meditation, there are various ways in which we can make false judgments, but in this context Descartes emphasizes that,

The chief and most common mistake which is to be found here consists in my judging that the ideas which are in me resemble, or conform to, things located outside me. Of course, if I considered just the ideas themselves simply as modes of my thought, without referring them to anything else, they could scarcely [vix] give me any material for error.

(AT VII: 37/CSM II: 26, emphasis added)¹

Descartes’ point is that, for the most part, ideas are not inherently misleading. If a person were to refrain from making any judgments about how the contents of her ideas correspond to features of external objects, and instead regard her ideas merely as modes of thought then she cannot fall into error, i.e. false judgment. Here’s Burman’s re-formulation of the Third Meditation passage:

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¹ Abbreviations for translations of Descartes’ works are as follows: ‘CSM I’ for Volume I of *The Philosophical Writings of Descartes*, ‘CSM II’ for Volume II and ‘CSMK’ for Volume III (Adam and Tannery, ‘AT’, references are also provided).
Since all error concerning ideas comes from their relation and application to external things, there seems to be no subject-matter for error whatsoever if they are not referred to externals.

(BAT V: 152/CSMK: 337, emphasis added)

Burman is on the right track, but he neglects Descartes’ acknowledgement of the slight possibility of error – “they could scarcely give me any material for error” – even when we consider ideas in the suggested manner. But what sort of error does Descartes have in mind?

Here is his clarification of the original passage for Burman:

Even if I do not refer my ideas to anything outside myself, there is still subject-matter for error, since I can make a mistake with regard to the actual nature of the ideas. For example, I may consider the idea of colour, and say that it is a thing or a quality; or rather I may say that the colour itself, which is represented by this idea, is something of the kind. For example, I may say whiteness is a quality; and even if I do not refer this idea to anything outside myself – even if I do not say or suppose that there is any white thing – I may still make a mistake in the abstract, with regard to whiteness itself and its nature or the idea I have of it.

(BAT V: 152/CSMK: 337)

To illustrate how ideas in se can still provide “material for error,” Descartes turns to our ideas of color. He claims that even without reifying an idea of color, we can make a false judgment about the content of the idea, that is, the color represented. The false judgment we are liable to make “in the abstract” is that color is a quality. What is of primary interest here is not necessarily how ideas of color can be inherently misleading, but rather the ontological import of this erroneous judgment about the nature of color. Insofar as this judgment is false, Descartes is denying color any ontological status. But Descartes is not merely claiming that colors are uninstantiated, he is asserting the stronger thesis that colors are not even qualities.

What are we to make of this thesis? For the most part, commentators have neglected this passage in constructing their interpretations of Descartes’ theory of color; however, there is good reason to believe that this passage should be taken seriously. If this fundamental claim

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2 To my knowledge, only Lawrence Nolan considers this passage seriously. See Nolan, “Descartes on ‘What we Call Color’.”

3 Descartes’ interview with Burman took place just two years before his death in 1650, and one could argue that it was one of his final and definitive statements on color.
about color can be reconciled with the alleged conflicting texts, then it’s quite clear what Descartes’ theory of color amounts to: eliminativism. For our purposes, we can distinguish between two forms of color eliminativism:4

(1) Weak eliminativism states that colors are properties, but it so happens that physical objects are not colored. Instead, weak eliminativists maintain that mental states bear color properties, e.g. sense-data, sensations, or a visual field. Thus, they are irrealists about colors in the physical world, but realists about colors in the mental realm.5

(2) Strong eliminativism states that colors are not properties; a fortiori nothing can be colored. Strong eliminativists are full-fledged irrealists about color, for them, neither physical nor mental entities bear color properties.6

In fact, standard interpretations of Descartes’ theory of color, at least by contemporary philosophers of color and mind, have maintained that Descartes is a weak eliminativist or (what is commonly called) a subjectivist.7 As the traditional story goes, Descartes expels color from the mechanistic realm of extension, transferring them into the immaterial mind where they enjoy secondary quality status through being instantiated in sensations. Over the past two decades, however, Descartes scholars have challenged the standard interpretation on textual and philosophical grounds.8 For example, it has been claimed that weak eliminativism generates systematic inconsistencies and ultimately pins Descartes with philosophical theses that he didn’t hold, like the existence of non-representational modes of thought, i.e. color qualia.9 Indeed, commentators have attributed Descartes with a range of positions, including dispositionalism,

4 One type of eliminativism that we will not consider is what one might call global eliminativism. According to this view, there are no properties of any kind, thus there are no color properties. This form of eliminativism is irrelevant for the present project because Descartes does not reject properties full stop in his metaphysics. See Cohen, The Red and the Real, 2.
5 For a formulation of weak eliminativism see Boghossian & Velleman, “Colour as a Secondary Quality.”
6 For strong eliminativism see Hardin, Color for Philosophers.
7 See Byrne & Hilbert, “Introduction,” xx; Maund, “Color.”
9 See Nolan, “Descartes on ‘What we Call Color’”
physicalism, dualism, and most recently nominalism. However, if the claim that colors are not qualities is Descartes’ fundamental position on color, then neither weak eliminativism nor the proposed alternatives can be the correct interpretation, for Descartes would then be a strong eliminativist – he would maintain that colors are not secondary qualities of bodies or minds because colors are not qualities.

In this paper, I will argue just that. Descartes does deny that colors are qualities (i.e. properties), which makes him a strong eliminativist. Strong eliminativism, however, does not easily evade the philosophical and textual problems that faced weak eliminativism. It remains a puzzling thesis, and raises a series of philosophical and exegetical questions, such as: Why can’t color be a quality? If colors aren’t qualities, then why do we experience/represent colors as such, e.g. as qualities of bodies? Lastly, how does this passage square away with other passages in which Descartes does seem to claim that colors are qualities? In what follows, I argue for Descartes’ strong color eliminativism, and construct Cartesian responses to such objections.

2. Descartes on Qualities

One way to interpret Descartes’ claim that color is not a quality is to determine whether he is using the term ‘quality’ like he does elsewhere. For this approach, there are three possible readings: Descartes could be denying either that colors are real qualities, principal qualities, or general qualities. In this section, I will argue that this strategy fails, and that Descartes is making a more nuanced metaphysical claim, which reveals his strong eliminativism. First, let us run through these three preliminary options.

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10 For a dispositionalist interpretation see Cottingham, “Descartes on Colour”, for a physicalist interpretation see Wolf-Devine, *Descartes on Seeing*, 44-50, for the dualist reading see Atherton, “Green is like Bread - The Nature of Descartes' Account of Color Perception,” for nominalism see Nolan, “Descartes on ‘What we Call Color’”
2.1 Real Qualities, Principal Qualities, and General Qualities

Sometimes, Descartes uses ‘quality’ in a way that captures the scholastic notion of a real quality. The Scholastics maintained that sensible qualities like colors, sounds, smells, and tastes supervene on but are not reducible to the primary qualities of bodies. On this view, colors are real qualities found in the world, and they are causally responsible for sensations of color through intentional/spiritual entities that are emitted from colored objects. It is overwhelmingly accepted that Descartes rejects this Scholastic notion, so one could interpret Descartes’ claim as merely another dismissal of real qualities, specifically, colors as real qualities.

Although Descartes doesn’t accept real qualities, he recognizes two different types of qualities in his ontology (AT VIIIA: 26/CSM I: 211). A principal quality is a mode of a substance – a modification or variation of the substance’s essence – which enables one to identify what type of substance it is a mode of. For example, if an object has the mode of shape, then one can know that the object must be composed of an extended substance, for immaterial substances – mind and God – cannot be delimited spatially. One could view principal qualities as a corollary to Descartes’ notion of a principal attribute, i.e. an attribute that enables one to identify the essence of the substance it is an attribute of. A general quality is a mode of a substance that doesn’t qualify as a principal quality. This kind of quality doesn’t indicate what substance it is modifying because it is a mode that applies to different types of substances. An example is temporality, a modification that both extended and thinking substances have. So, one could try to read Descartes as rejecting the possibility that colors could be principal qualities,

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12 Pasnau, Metaphysical Themes, 463-5.
13 For an excellent examination of Descartes on real qualities See Menn, “The Greatest Stumbling Block”
14 Here, I am not taking a stance on whether principal or general modes are intrinsic or phenomenal features of substances.
qualities of a certain kind of substance (mind or body); or, one could read Descartes as rejecting colors as general qualities, qualities of both finite substances (mind and body).\footnote{Atherton’s dualist view actually comes close to this general quality reading for she maintains that, for Descartes, colors are qualities of both minds and bodies.}

2.2 Colors are Not Res

*Prima facie*, Descartes’ claim that color is not a quality must fit one of his above uses for ‘quality’; however, I actually think that none of them apply. The problem with reading any of these uses of the term into Descartes’ claim is that it leaves open the possibility that color could be another kind of quality. For example, if Descartes is denying that colors are real qualities, does that mean colors could be principal or general qualities, and *vice versa*? Moreover, it technically leaves open the possibility that color could be some other type of thing entirely, e.g. an attribute (an enduring and unchanging feature of a substance) or a substance (a thing that exists independently of other things). Such readings are explicitly ruled out, however, when we attend to a particular part of Descartes’ response to Burman more closely. In the beginning of Descartes’ explanation of the false judgment we can make about an idea of color *in se*, he says:

\[\begin{align*}
\text{I may consider the idea of colour, and say that it is a thing or a quality [rem, qualitatem]; or rather I may say that the colour itself, which is represented by this idea, is something of the kind [tale quid esse].} \\
\text{(AT V: 152/CSMK: 337)}
\end{align*}\]

Here, Descartes not only denies that color is a quality, but also that color is even a *thing* [*res*]. *A fortiori*, colors cannot be real, principal, or general qualities, nor could they be attributes or substances. One might resist my reading and object that there is an ambiguity in the phrase “something of the kind” such that Descartes could just be denying that color is a quality, thus allowing that colors could be some other type of thing (which would show that Descartes is not asserting strong eliminativism in this passage). For in the latter half of the passage, when Descartes examines more closely the content of the idea of color, the whiteness that is
represented, he only denies that whiteness is a quality, but he nowhere says that whiteness isn’t a thing:

I may say whiteness is a quality; and even if I do not refer this idea to anything outside myself – even if I do not say or suppose that there is any white thing – I may still make a mistake in the abstract, with regard to whiteness itself and its nature or the idea I have of it.

(AT V: 152/CSMK: 337)

Though understandable, this objection is mistaken on two counts. First, there is no ambiguity here. *Tale quid esse* (“something of the kind”) unequivocally refers back to *rem, qualitatem* (“thing or quality”), not just quality. An acceptable translation of *tale quid esse* could even be “thing or quality”; in fact, this is how Jonathan Bennett translates it. Second (and more importantly) this objection falsely presupposes that Descartes is indicating two false judgments we can make about color: one about the *idea* of color, and another about the *content* of the idea.

In the *Fourth Replies*, Descartes makes a distinction between two dimensions of an idea: an idea can be understood *materially* in virtue of being a operation of the mind, and *formally* in virtue of what it represents (AT VII: 232/CSM II: 162-3). In light of this distinction, a surface reading of this passage may very well suggest that we can make the relevant false judgment about both dimensions of an idea of color. Descartes seems to describe it in this way: “I may consider the *idea of colour*, and say that it is a thing or a quality; or rather [*seu potius*] I may say that the colour itself, which is *represented by this idea* is something of the kind” (AT V: 152/ CSMK: 337, emphasis added). However, this reading renders Descartes’ first claim unintelligible, because Descartes would be contradicting himself if he were claiming that ideas, taken materially, aren’t things or qualities. On any construal of Cartesian ideas, ideas are things in virtue of being real modes of thought, specifically, principal qualities of finite mental substance.

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16 “For example, in thinking about the idea of colour I might say that it is a thing or a quality; or rather I might say that the colour represented by this idea is a thing or quality” (5). www.earlymoderntexts.com/pdf/descburm.pdf
It is best, then, to read *seu potius* ("or rather") as indicating that the second sentence is clarifying the first: the object of the false judgment is not the idea of color *qua* vehicle of representation, but rather about the representation of the color itself. Thus, Descartes is claiming throughout his response to Burman that colors are neither qualities nor things.

2.3 Colors Could Only Be Qualities

So then why doesn’t Descartes just say that colors aren’t things, and drop the references to qualities? Wouldn’t this more effective? The thought is this: if color were to have any ontological status then it would have to be a quality, that is, some modification of a substance. By Descartes’ lights, this is really the only way in which we can conceive of colors as existing because colors could neither be attributes nor substances. Nevertheless, Descartes adds that colors aren’t things so he won’t mislead his readers into thinking that colors could have some other ontological status. This explains why, when considering the ontological status of colors, Descartes limits the scope of the discussion to whether colors are qualities. Thus, in claiming that colors aren’t qualities, Descartes is effectively denying that colors are things.

3. Strong Eliminativism and Color Representation

If Descartes maintains that colors are not qualities of body or mind, then what explains our experience of color? In this section, I will show how Descartes can be a strong eliminativist by providing an account of color experience or representation that doesn’t commit him to sensational color qualities. I take it that avoiding subjectivism in a coherent manner is the main difficulty with ascribing strong eliminativism to Descartes. In this context, I will not explicitly argue against interpretations that have attempted to locate colors in bodies; I am already assuming that Descartes is an eliminativist about physical colors.17 My task is to show that he is

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17 See Nolan, “Descartes on ‘What we Call Color’,” for an excellent critique of such interpretations.
also an eliminativist about colors in mental substance. To do this, I will show that he reduces color representation to various facts about our sensory and innate mental faculties; that is, he provides a reductive account of color experience.

3.1 Some Preliminaries

In a number of passages, it seems like Descartes identifies colors with sensations. But, when we attend closely to these passages, it turns out that Descartes actually claims that we have sensations of color, sensations that represent colors. Once we appreciate the intentionality of Cartesian sensations, we are in a position to understand how Descartes can account for representations of color without maintaining that the representation or the vehicle of representation (the sensation taken materially) instantiate color qualities. The case of color is tricky, so I will first give an analog to help us see the structure of a strong eliminativist explanation of color representation. Consider unicorns. Presumably, we are irrealists about unicorns because unicorns are not things. Nevertheless, we can have ideas, illusions, and hallucinations of unicorns. Notice that we don’t explain such cases by maintaining that these mental states bear unicorn properties. Rather, we tell some story about how our senses can deceive us into thinking that we actually experience a unicorn or how a representation of a unicorn is constructed, e.g. we combine various familiar objects of experience (horse, horn, etc.). Likewise, we can consider an account of color representation that doesn’t appeal to the representation bearing color qualities. Naturally, one might object that there are significant disanalogies between representing unicorns and colors. First (pace Kripke), unicorns are possible objects, which is (arguably) why we have the capacity to represent them. It seems like the case of color for Descartes is quite different. Insofar as Descartes claims that colors are not qualities, one

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might think that colors are also impossible qualities. If his claim has this modal implication, then
the prospects for Cartesian color representation are grim for there is a serious worry about
representing impossible things. For example, how does one go about representing a circle-
square? Thus, if Descartes’ claim were that color couldn’t be a thing, then colors would be
metaphysically on par with circle-squares, which effectively rules out the possibility of our
experiencing them.

However, this worry is misguided. Strong eliminativists merely claim that colors are not
properties; they don’t claim that colors couldn’t be properties. As for Descartes, his claim cannot
have this modal implication for other metaphysical considerations, specifically God’s
omnipotence. If Descartes were to claim that colors qua qualities are impossible, he would set an
odd and superfluous restriction on God’s omnipotence because it isn’t clear how the claim that
colors are qualities is contradictory. Moreover, there is evidence to suggest that Descartes
thought that God could actualize what we conceive as contradictions (AT 4:118/CSMK: 235; AT
5:224/CSMK: 358–59). Thus, if colors qua qualities were contradictory by our lights, this does
not rule out their logical possibility with respect to God’s will.¹⁹

But there is a further worry about my analogy. Experiences of uninstated unicorns are
possible, one might argue, because they are complex features of experience that are constructed
out of other instantiated things we have previously experienced. A strong eliminativist like
Descartes, however, cannot avail himself of this explanation. He cannot say that colors are
uninstated complexes that are constructed out of simple instantiated properties like, for
example, hue, chroma, and brightness. This strategy is self-defeating as long as one maintains

¹⁹ Strictly speaking, this also means that colors could be attributes or substances (and real qualities for that matter).
strong eliminativism, because one should already hold that such simples are uninstantiated.\textsuperscript{20} Moreover, we shouldn’t ascribe this strategy to Descartes because (1) it is an implausible account of the nature of color, and (2) there is no textual evidence that Descartes goes in for such a move.

So then what explains our experience of color? Moreover, given the considered objections, what has the unicorn analogy shown us? Let me begin by addressing the latter. Despite the disanalogies, the purpose of the unicorn example was merely to motivate the avoidance of appealing to mental states that bear color qualities in an eliminativist explanation of color experience. Insofar as we don’t explain unicorn experiences by appealing to mental states that bear unicorn properties, we can consider an account of color experience that doesn’t appeal to colored sensations. With this in mind, let us now turn to Descartes’ explanation of our experience of color.\textsuperscript{21}

3.2 Innateness and Color

Descartes’ explanation of color representation falls out of his general account of sensation. There are various interpretations of Cartesian sensation on offer; however, the present task doesn’t depend on any particular one. I will present an uncontroversial sketch of Descartes’ theory. What I will highlight is the role of innate ideas in sensory experience, and the relevant implications for strong eliminativism and color representation.

\textsuperscript{20} David Hilbert first raised this objection to me in conversation. This objection is also considered by Holman in “Color Eliminativism and Color Experience,” 42. Holman’s response to it helped me address it in a similar way.

\textsuperscript{21} There is another worry, but I cannot address it in this paper. Illusions of unicorns are not philosophically problematic because they are rare and so they can be explained away without much revision to our epistemic practices. Unlike unicorns, colors are a systematic feature of our experience of the world (unfortunately, unicorn experiences are not). This objection is one of the main reasons why contemporary philosophers of color resist eliminativism. According to them, eliminativism is too revisionary because it charges our experience and perceptual faculties with widespread misperception and error. Eliminativists grant that their theory is extremely revisionary, and offer various explanations (cognitive, biological, psychological, etc.) for why we experience the world as colored. On this count, Descartes has some interesting things to say, especially in the Sixth Meditation, but exploring this would take us off track here.
According to Descartes, the immaterial mind is coordinated with the physical brain such that brain states occasion corresponding mental states. The brain states are determined by the various ways in which distal objects stimulate sensory organs and the nervous system. Upon formation in the seat of mind-body interaction, the pineal gland, a brain state serves as a natural sign for the mind to form an appropriate corresponding sensation. In the case of visual sensation:

[W]e must suppose our soul to be of such a nature that what makes it have the sensation of light is the force of the movements taking place in the regions of the brain where the optic nerve-fibres originate, and what makes it have the sensation of colour is the manner of these movements... But in all this there need be no resemblance between the ideas which the soul conceives and the movements which cause these ideas.

(AT VI: 130-131/CSM I: 167)

Descartes frequently stresses that mental states do not resemble brain states. In the case of color, this means that there is no resemblance between “optic-nerve fiber movement” and, say, a sensation of green. What this implies, then, is that a brain state that occasions a sensation of green does not supply the content of a green color sensation; it merely indicates the mind to form such a sensation. That is, a brain state does not instantiate the property green, which the mind then has a sensation of. Rather, the brain state is merely a corporeal figure, motion, nerve excitation, etc. So then what does supply sensory content, that is, the representation of green? For Descartes, it is the mind: “the sense-organs do not bring us anything which is like the idea which arises in us on the occasion of their stimulus, and so this idea must have been in us before” (AT III: 418/CSMK: 187). In the present case, the content of color sensations is provided by our pre-existing innate ideas of color.

The ideas of pain, colours, sounds and the like must be all the more innate if, on the occasion of certain corporeal motions, our mind is to be capable of representing them to itself, for there is no similarity between these ideas and the corporeal motions.

(AT VIIIIB: 359/CSM I: 304, emphasis added)

Innate ideas structure our experience and provide its content;22 as Descartes says, “there are in us

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22 For more on innate ideas see Nelson, “Cartesian Innateness” and Landy, “Descartes’ Compositional Theory of Mental Representation.”
certain primitive notions which are as it were the patterns on the basis of which we form all our other conceptions” (AT III: 665/CSMK: 218). Notice that in this passage Descartes doesn’t say that colors as such are innate in the mind. If that were the case, then he would be admitting sensational color qualities in his ontology. Instead, he says that we have innate ideas of color which amount to the mind’s capacity to represent colors. This shows that Descartes doesn’t explain our experience of colored objects by claiming that our sensations are colored, and that we confuse the two or project the latter onto the former. Rather, our experience of color is a fact about our innate mental capacities and the way they structure our sensory experience. In regard to how we experience color, Descartes does not have a complex evolutionary story to tell (like some contemporary philosophers of color) because our innate capacity to represent color is due to the way in which God determined the mind to interact with bodies.23 Thus, like an idea of a unicorn, an idea of color does not bear the qualities that it is representing. For Descartes, the content of an idea of color is provided by the innate capacities of the mind to represent color, which occurs when an appropriate brain state is formed. Understood in this way, Cartesian color experience is reduced to such facts about our sensory and innate faculties.

4. Conclusion

In this paper I explored Descartes’ (neglected) strong eliminativism as indicated in Conversation with Burman. Strong eliminativism has not yet been ascribed to Descartes, but I hope to have shown that is a viable candidate for textual and philosophical considerations. The eliminativism I propose does not generate textual inconsistencies or pin Descartes with theses he didn’t hold (as some have claimed). Moreover, it’s philosophical (and historically) interesting

23 In regards to why we experience color, Descartes’ account is more developed. I will not delve into this here, as it is beyond the scope of this paper. Some have claimed that sensory experience has a teleological role in the life of the mind-body union; however, this claim has also been challenged. I am not sure how this is supposed to fit with Descartes’ account of color, but it is an area worth exploring some more.
insofar as it has affinities with contemporary attempts to reduce color experience to facts about human perception.24

Works Cited


24 Hardin, Color for Philosophers, 109-112.