Intentionalist reply 1: Spectrum inversion is impossible

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One of the virtues of Byrne (2006) is that it makes it very clear that there is no such thing as 'the' inverted spectrum scenario. There are many different spectrum inversion scenarios; which one you are interested in should depend on what you are trying to prove. Basically, spectrum inversion scenarios work like this: we try to show the possibility of Nonvert and Invert, who are spectrum inverted relative to each other, and have some class F of properties in common. If we succeed in showing that the scenario in question is possible, we have succeeded in showing that phenomenology does not supervene on the F-properties. So spectrum inversion scenarios are ways of arguing against the supervenience of phenomenal properties on some target class of properties.

In typical versions of the inverted spectrum scenario, people are interested in arguing against broad metaphysical theses, like physicalism, or against broad theses about the nature of mental states, like functionalism or behaviorism. In the first case, the F-properties might just be all the physical properties; in the second case, the F-properties might be the functional roles of the inner states of Invert and Nonvert, or their behavioral dispositions.

In our case, we are interested in whether the phenomenological properties of experiences supervene on their content + their modality. (That is what the minimal intentionalist is committed to; though we have also seen that you can challenge minimal intentionalism by showing that the reverse supervenience claim fails as well.)

It is hard to build into the case that Nonvert and Invert have experiences with the same content; the minimal intentionalist is likely to deny the possibility of the stipulated scenario. That is why people go via spectrum inversion *without misrepresentation*. If we can have an independent argument that neither Invert nor Nonvert are misrepresenting color then, since the thing in question has only one color, we must have sameness of color content.

You can think of this strategy as having two versions. First, you might argue directly from Nonvert and Invert having a certain kind of parity to the idea that one gets things right iff the other does. For example: neither of them would be any more justified in their color judgements; neither would have any more trouble getting around in the world; etc. A worry about this strategy is that it seems far from obvious that these kinds of parity arguments are, in general, convincing. Why couldn't two people be epistemically on par, for example, while one of them gets it right and the other gets it wrong? This seems to happen all the time. (A stronger version of the same form of argument is the 'Inverted earth' argument, which we discussed above.)

A second version of the strategy is to argue that neither can be misrepresenting because each is having experiences with the same content; and each is having experiences with the same content because they have the F-properties in common, and content supervenes on F-properties.

In this version of the argument, the fact that neither is misrepresenting the color of the object is

just a distraction: we can argue directly from the fact that content supervenes on F-properties but phenomenology does not to the conclusion that phenomenology does not supervene on content. (Here I'm abstracting from worries about difference in sense modalities.)

On this view, the key question is really: what are the F-properties? And can Invert and Nonvert really have the F-properties in common?

The most common choice for the F-properties is some version of 'the functional properties'. It is difficult to call before your mind the functional identity of all of the states of Invert and Nonvert, so we will instead thing about whether Invert and Nonvert could be behaviorally indistinguishable. The idea is that if Invert and Nonvert are functional duplicates, they are behavioral duplicates; and if they are behavioral duplicates, that lends at least some credence to the idea that they could be functional duplicates. So the question is: is behaviorally undetectable spectrum inversion possible?

So answer this question, we will need to get a bit clearer on what spectrum inversion involves. Construct a color circle (the Natural Color System hue circle) with yellow on the bottom and blue at the top, red and the left and green at the right. (These hues are chosen because they are unique, in the sense that they do not seem to be mixtures of the other hues.) When you look at this circle, there seems to be no problem with imagining it flipped: either blue/yellow flipped, red/green flipped, or both at the same time.

However, it is not so easy, for (among others) the following reasons:

- The problem of purple.
- Asymmetries introduced by brightness and saturation. The most saturated blue is darker than the most saturated yellow.
- "Why is there no such thing as blackish yellow?"
- Saturated vs. desaturated reddish-blue and greenish-yellow.

A reply: even if our color space is asymmetrical, we can imagine creatures who have a sense modality with a symmetrical quality space. Behaviorally undetectable inversion would be possible for those creatures (whether or not it was spectrum inversion), and this could be sued to raise all of the same problems. A possible example: black/white vision. For a reply to this, see Broackes (2007).

References

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