# Intentionalism, spectrum shifts, and the puzzle of true blue

# PHIL 93507 Jeff Speaks

## October 6, 2009

## 1 Block's 'spectrum shift' argument against intentionalism

Block (1999) argues that spectrum shifts are probably quite common and that people of different races, ages, and sexes are quite likely spectrum shifted with respect to each other. Some arguments for this conclusion:

- Anomaloscope experiments, in which subjects try to match a blend of red and green light with an orange or yellow light. Women and men match these differently.
- Differences in the location of unique green. There is some overlap between the location of unique green and unique blue even among subjects which test for normal color vision.

Spectrum shifted subjects differ in the phenomenal characters of their perceptual experiences of the same surface. For them to be a problem for intentionalism, we need a further premise, namely that the contents of their color experiences do not differ.

Block seems to argue for this using Locke's strategy: he argues from (i) the claim that a pair of spectrum shifted subjects can both fail to misrepresent the relevant surface and (ii) the claim that the surface has one color (rather than different colors relative to different subjects) and (iii) the claim that their experiences do not differ with respect to the representation of non-color properties to the conclusion that they represent the surface as having the same color.

Block's claim about the actual prevalence (and hence possibility) of spectrum shifted subjects seems plausible. Hence to block his argument the intentionalist must deny either (i) or (ii) or (iii).

We've already seen that color relativists like Johnston (1992) and Cohen (2004) deny (ii). Hence it seems that spectrum shifts are no problem for the intentionalist who is also a color relativist: she can say that the relevant pair of experiences differ in content, but that both veridically represent the color of the surface.

Fans of appearance properties will deny (iii). We'll discuss this option separately.

So let's suppose that we want to be intentionalists but not color relativists and not believers in the perceptual representation of appearance properties; then we must deny (i), the claim that neither spectrum shifted subject misrepresents. How plausible or implausible is this denial?

## 2 True blue

In recent literature, this has been discussed under the heading of the 'puzzle of true blue', which is more or less the problem about unique green raised by Block. Both Byrne & Hilbert and Tye have defended the denial of (i), and have argued that (most) spectrum shifted subjects are misrepresenting the colors of things.

Tye (2006) suggests that actual cases of spectrum shift are cases in which subjects differ with respect to representation of fine-grained colors, but agree in representation of coarse-grained colors. This package of views allows us to preserve intentionalist while granting that, in the sort of perceptual representation of color which matters for most purposes, both subjects are perceiving veridically. It is unsurprising that there is error at the level of fine-grained colors, since there is no evolutionary advantage to getting things right at this level.

Cohen et al. (2006) point out that spectrum shifted subjects can also differ with respect to the representation of coarse-grained colors (as in the example of unique blue and unique green discussed above). So there must be error even at the level of coarse-grained properties – even if it is a bit less widespread.

But is this combination of views so bad? Cohen objects that it is hard to see what, metaphysically, could make one perception of a fine-grained color veridical and the other not. Byrne & Hilbert reply that this is not so tough. One subject represents the color chip as unique blue, the other represents it as greenish-blue, and the chip is (let's say) greenish-blue.

Who's right here? Is there something implausible about the straightforward Byrne & Hilbert line?

#### 3 A puzzle about the anti-intentionalist treatment of spectrum shifts

Block thinks that the right response to cases of spectrum shifted subjects is straightforward: we should concede that the two subjects who differ over the location of unique green differ in the phenomenal character of their experiences, but both represent the surface's color correctly, and hence both represent it as having the same color. But there is something odd about this. Consider what they would say about the relevant surface. One person might say that it 'looks (appears, seems) pure green, with no hint of blue or green' whereas the other might say that 'it looks slightly bluish'. Isn't it hard to square these reports with the denial of the claim that the second person's visual experience, but not the first person's, represents the surface as bluish? (Of course, the reliance on these first person reports is just a heuristic — it seems to me that the point remains, whether or not the subjects have the verbal resources to describe the relevant differences.)

#### References

- Ned Block, 1999. Sexism, Racism, Ageism and the Nature of Consciousness. *Philosophical Topics* 26(1-2).
- Johathan Cohen, C. L. Hardin, and Brian P. McLaughlin, 2006. True Colours. Analysis 66(4):335–340.
- Jonathan Cohen, 2004. Color Properties and Color Ascriptions: A Relationalist Manifesto. *The Philosophical Review* 113(4):451–506.

Mark Johnston, 1992. How to Speak of the Colors. Philosophical Studies 68(3):221–263.

Michael Tye, 2006. The Puzzle of True Blue. Analysis 66:173–178.