Seeing Dark Things. The Philosophy of Shadows.

Roy Sorensen, *Seeing Dark Things. The Philosophy of Shadows*. Oxford University Press, 2008, pp. Xiii + 310, 2 halftones, 57 line illus, $45 (cloth)

Roy Sorensen's adventure in Shadowland started with his prize-winning article, "Seeing Intersecting Eclipses" (published in *The Journal of Philosophy*, and chosen by the board of the *Philosopher's Annual* as one of the ten best philosophy articles of 1999), which is the basis for the first two chapters in this book. The recipe adopted in that article is followed in most of the following thirteen chapters, five of them being based on Sorensen's previous articles on the topic: start with an open mind regarding the existence and causal efficacy of absences, shadows, i.e. absences of light, in our case, devise a riddle involving perception of such absences, and draw the consequences for the philosophy of perception and/or ontology.

In what follows, given the limited space for a book review, I will only discuss three of the chapters of the book in more detail and more critically, while giving a brief description of the other ones.

The first two chapters discuss the riddle of intersecting eclipses. Imagine that the Earth has two moons, one that is smaller but closer to us, Near, and one that is larger but farther from us, Far. The two moons could line up between us and the Sun in such a way that we see a solar eclipse. Further suppose that the ring of light of the eclipse would appear exactly the same to us if either of the moons were destroyed while keeping the other in its place. What do we see when looking at the eclipse – Far or Near?

Sorensen argues that the causal theory of perception, which he subscribes to, yields Far as the thing we see; Near is causally idle. We are tempted to take Near as the thing we see because it faces us while obscuring Far. In the normal case, when objects are illuminated and we see them in virtue of the light they reflect, Near would indeed be seen, because Far would be causally idle. However, in our case the objects are back lit, so what we see is a silhouette. We see silhouettes merely in virtue of the contrast between the darkness of their shadows and the surrounding light. Since Near is completely covered by Far's shadow, it cannot be causally relevant to what we see, so the silhouette we see is Far's, and by seeing its silhouette we see Far as such.

Sorensen addresses the worry that what we experience is not counterfactually dependent on Far: if Far disappeared we would still have the same scene before our eyes. However, following Brian McLaughlin, he argues that this is bad for the causal theory of perception as based on David Lewis's (earlier) counterfactual theory of causation – what counts is not what *would* cause me to have my experience but the *actual* physical process that does it.

I agree that we do see Far in spite of the counterfactual theory, but I think a good case can be made for the view that what we see is both Far and Near, that is, the scattered object Far + Near. Consider making huge perforations into both moons until they become rings, so that the silhouette we see is a ring, and such that it is true that we would still have the same experience, were either of the moons destroyed while keping the other one in its place. Isn't it intuitive to think that Near-ring has to satisfy certain very precise conditions regarding its shape, location, and dimensions in order for us to actually see a dark ring of a certain location and certain dimensions? Even if Near-ring is covered by Far-ring's shadow, we can take Near-ring's idleness, that is, its *not interfering* with the light that is *not reflected or absorbed* by Far-ring as quite important in order for us to see the silhouette exactly as we see it. This brings us to Lewis's *latest* counterfactual theory of causation – causation as influence.

According to this theory, Where C and E are distinct actual events, C influences E if and only if there is a substantial range C1, C2, ... of different not-too-distant alterations of C (including the actual alteration of C) and there is a range E1, E2, ... of alterations of E, at least some of which differ, such that if C1 had occurred, E1 would have occurred, and if C2 had occurred, E2 would have occurred, and so on (Lewis 2000, p. 190).

The definition of an alteration is: an alteration of event E is either a very fragile version of E or else a very fragile alternative event that is similar to E, but numerically different from E. (Lewis, 2000, p. 188)

Both Near-ring and Far-ring conform to the condition of influence: there are slight changes in either of them (the relevant changes in our case are spatial) that would generate corresponding changes in what we experience. Of course, the condition of influence would not hold if Near were much smaller than it is, or even a little smaller; this is why the eclipse case would not generalize to cases like a little bird flying in front of an eclipse – the bird is too small to be counted as influencing what we see.

This brings me to chapter 3. Consider a brick, a truncated cone whose appearance duplicates the appearance of the shadow cast by a cone illuminated by some light source. When the brick is slid into the exact spot of the shadow, there is no discernible difference. The question is: what do we see under the illuminated cone once the brick is parked in the spot previously occupied by the shadow?

We seem to only have three options, and none of them appears to be acceptable. The first option is the shadow. Against this answer we should observe that a shadow cannot exist wholly within an opaque object; that is why we don't take a brick lying on the floor, in the presence of a light source directed upon it, to cast a shadow on or through the floor. A more precise formulation of this idea is the condition: a nonzero volume of space, for which it is true that light would have penetrated it, had it not been blocked by the obtruder (Aranyosi 2007, 417). Since the brick is supposed to exactly occupy the dark spot, we could only be left with at most an abstract shadow-boundary, which does not qualify as a surface to be causally efficacious on our senses.

The second option is the brick. The brick is causally idle, it is completely covered by darkness, so it cannot be the thing we see

Finally, one could propose a third dark thing that is neither a shadow, nor the brick. But the causal mechanism that is responsible for such a third kind of being is the same as the one responsible for the existence of a shadow.

According to Sorensen, what we see is the completely hollow shadow via its merely abstract "surface", because shadows, as opposed to material objects, only have such surfaces by their very nature.

Based on the previous point about causation as influence, a good case could me made for our seeing what I call "the exactly shaded brick", rather than the completely hollow shadow. An exactly shaded object *S* is one that (1) has no surface in contact with any quantity of light and (2) occupies *exactly* the region *R* that would satisfy my above-mentioned condition, with respect to an obtruder *O*, had *S* not been present. Exactly shaded objects do satisfy the influence condition, so they qualify as causes of what we see. We can dramatize this point by considering a variation of Sorensen's example, in which the brick is in motion, and due to motion sensors, the shadow that would be cast by the cone instantaneously accommodates any such motion in a way to keep the brick as exactly shaded. Now it seems there is no time at which the brick receives any light, yet it is intuitive to take the cause of the changes we experience to be the motion of the brick itself.

Chapter 4 deals with the motion of shadows. Sorensen argues that his theory of shadows as existing only when some light is blocked commits us to affirmatively answer the question whether the shadow of a spinning object is itself spinning in certain conditions.

In Chapter 5 Sorensen argues against Berkeley's thesis that the spatiality of sight is to be traced back to our sense of touch. Shadows are a counterexample to the thesis as they are untouchable but seen in space.

The next four chapters discuss some phenomena that are confused with shadows, but are not shadows according to Sorensen's light blocking theory. These phenomena are holes in the light that result from processes different from light blockage.

Chapter 10 is a discussion of why negative existences like shadows are to be accepted in our ontology, whether it is correct to regard shadows as holes in light, and some issues regarding our perceptual knowledge and phenomenology of shadows.

In chapter 11 Sorensen defends the unpopular idea that black is a color and argues that shadows are not mereley dark but black.

The last three chapters have a common theme, namely, the difference between experiencing an absence and not experiencing a presence. Totally color-blind people, Sorensen argues, are not seeing black and white, only people who see in color can perceive the absence of hues. Similarly, we do see in complete darkness. There is a categorial difference between experiencing the darkness of a cave and not experiencing anyhting because of blindness. Finally, the ideas about seeing in the dark are extended to the auditory modality in the last chapter, where Sorensen argues that we can hear silence and that it is to be taken as a succesful representation of an absence, that of sound, rather than as the absence of an auditory representation, as in the case of deafness.

Obviously, in this short book review I could only scratch the surface of the substantial content of Sorensen's remarkable and uniquely rewarding and entertaining new work.

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