

PHILOSOPHY 5340 – EPISTEMOLOGY

Topic 8: Michael Huemer on Direct Realism Versus Indirect Realism

Part 3: Chapter VII of Michael Huemer's *Skepticism and the Veil of Perception*: "An Objection to Indirect Realism: The Problem of Spatial Properties"

In this chapter, Mike sets out two objections to indirect realism. The first, which occupies most of the chapter, is concerned with what account can be given of the location of sense data. The second involves the contention that sense data, if they existed, would have indeterminate properties.

Mike begins by pointing out that he will be using the expression "sense data" in an extended sense in this chapter:

"In this chapter, I use 'sense data' for whatever mental states, objects, events, properties, or other kind of mental phenomena we are directly aware of in perception, assuming indirect realism is true. If indirect realism is not true, then there are no such things as sense data." (173)

Comment

Indirect realism involves two theses, one about the direct objects of awareness in perception, and the other about what sorts of beliefs can and cannot be noninferentially justified. So even if indirect realism were false, the sorts of objects that would exist if indirect realism were true might very well still exist, since it might well be the case that only **the part** of indirect realism that concerns **noninferentially justified beliefs** turned out to be false.

1. The First Argument against Sense data

The first argument that Mike Huemer offers against sense data in this chapter is as follows:

1. In perception, the things I am directly aware of (at least sometimes) have locations.
2. Only physical things have locations.
3. Therefore the things that I am directly aware of in perception (at least sometimes) are physical things." (149-50)

2. Some Comments on this Argument

Comment 1: A General Question concerning the Location of Various Mental Entities

The crucial premise in this argument is premise 2, and, even leaving aside the question of sense data, this premise immediately gives rise to a number of questions, including:

1. Do human **minds** have locations? If they do, then, according to premise 2, human minds must be physical things – presumably brains.

2. If human **minds** do **not** have locations, then what account is to be given of the fact that what happens in one particular brain is causally connected with one particular mind, and not with other minds?
3. Do **mental states** – such as sensory experiences, thoughts, and feelings – have locations? If they do, then, according to premise 2, such mental states must be physical things – presumably certain physical states of relevant neuronal circuitry.
4. If **mental states** do **not** have locations, then what account is to be given of the relationship between physical states of the neuronal circuitry in one particular brain and the mental states of one particular mind, and the absence of such a relation between physical states of that neuronal circuitry and the corresponding mental states of other minds?
5. Do **bodily sensations** have locations? In contrast to most mental states, it certainly **seems** as if they do. Thus a tingling sensation, for example, may seem to be in one's foot, while a toothache seems to be in a particular part of one's mouth. But, as with qualitative color properties, there may be reasons for thinking that bodily sensations are not located where they appear to be.

As regards question 3 above, Mike says a bit later: "I, of course, believe in the existence of mental states called 'perceptual experiences', which, in my view, have no location⁷." (152) In the attached footnote 7, Mike then says: "I am a dualist; if physicalism is true, then I suppose that perceptual experiences are located in the brain." (173)

The view that dualistic mental states have no location in the spatiotemporal world, however, seems problematic. Thus, on the one hand, if mental states have locations in the world of space and time, there need be no problem about the form of the laws of nature that deal with causal relations between brain states and mental states, since they could have the following form:

For any location, *S*, the occurrence of a brain state of type *B* at location *S* causally gives rise to the occurrence of a mental state of type *M* at location *S*.

But what is the form of the law if mental states do **not** have any location? It seems that one has to bring in some relation, *R*, that links either the mental item itself, or the whole mind, to the brain, where relation *R* is not a spatial relation. So the law might then have the following form:

For any location, *S*, the occurrence of a brain state, *X*, of type *B* at location *S* causally gives rise to the occurrence of a mental state of type *M* in some mind *P* that stands in (the non-spatial) relation *R* to *X*

The question then is what account is to be given of relation *R*. This problem is avoided if the idea that mental states have spatiotemporal location is accepted.

Comment 2: Location and Immaterial Minds

Many religious people, and some present-day philosophers, believe that human minds are **immaterial substances**. There seem to be good empirical objections to this view. But even if it is not true that human minds are immaterial substances, it is surely true that humans **could** have had minds that were immaterial substances. But if premise 2 is not only true, but necessarily so, then it would follow that such immaterial

substances would not have had any spatial location. But why would it be impossible for such immaterial substances to have had spatial locations?

Consider other possible immaterial minds – such as ghosts and angels. A ghost is thought of as haunting one particular house at a time. But how could one explain a ghost's inability to haunt **many** houses at one and the same time? The natural explanation, surely, is that either the ghost can only affect material things where the ghost itself is located, or, at least, that it can only affect material things in locations that are within a certain distance of where the ghost itself is located. If explanations of this spatial sort are rejected, it is not easy to see what other type of explanation can be put in its place. It seems very natural, then, to think that it is logically possible for such immaterial substances to have spatial locations.

Comment 3: Bodily Sensations

In his book *Perception – A Representative Theory*, Frank Jackson discusses the question of whether bodily sensations have location at considerable length in Chapter 3, "The Existence of Mental Objects", (pages 77-86), and he argues for the view that they do have location. Mike does not comment on Jackson's discussion.

In the case of bodily sensations, such as pains, tingling sensations, feelings of muscular tension, etc., there is the following argument, which **parallels** the argument that Mike has offered in the case of perception:

1. Bodily sensations have locations.
2. Only physical things have locations.
3. Therefore, bodily sensations are physical things.

One can then continue this argument as follows:

4. Bodily sensations are mental items or states.
5. Therefore, some mental items or states are physical things.

What is one to say about this argument is one is a property dualist? If this argument is sound, doesn't it show that the property of being a sensation of the tingling sort is a physical property, and thus that property dualism is not true in the case of such sensations? But if property dualism is false in such cases, why think that it is true in the case of **any** mental states?

One response to this argument is to say that bodily sensations do **not** have locations, on the ground that if bodily sensations were located in the parts of one's body where they appear to be, the causal processes running from neural states to the bodily sensations to which they causally give rise would be spatially gappy causal processes, and that spatially gappy causal processes should be rejected. Accordingly, one has a reason for concluding that bodily sensations are not located where they appear to be.

This argument, however, does not show that bodily sensations have no location at all, and if bodily sensations do have spatial location, on the ground that the mind is where the brain is, and sensations are located in the mind, then the premise that only physical things can have locations is still going to entail problems for property dualism.

Comment 4: Introspection of Hallucinatory Experiences

In the case of visual hallucinations, it can be argued that one is aware of instances of qualitative color properties, and aware of **spatial relations holding between such instances**.

Notice, moreover, that if this view is questioned, one can consider instead the case where one **deliberately introspects** the qualitative nature of a hallucinatory experience, and one can ask what one is aware of when one thus introspects. The answer, surely, is that one is aware of instances of qualitative color properties, and aware of those property instances as standing in spatial relations – both **betweenness** relations and **relative distance** relations, where a relative distance relation is a relation that compares the distance between two objects A and B with the distance between two objects C and D, such as, for example, the relation that holds among objects A, B, C, and D when the distance between A and B is greater than that between C and D.

Accordingly, one can parallel Mike's argument as follows:

1. In **introspection** of visual hallucinatory experiences, one is directly aware of instances of qualitative color properties that stand in betweenness relations and relative distance relations.
2. Only physical things can stand in betweenness relations and relative distance relations.
3. Therefore, the things that one is directly aware of in introspection of visual hallucinatory experiences – namely, instances of **qualitative color properties** – are **physical things**.

I would claim that Premise 1 of this argument is true, while the conclusion is false. If this is right, then Premise 2 must be false. One has, accordingly, the following result:

There are things, other than physical things, that can stand in betweenness relations and relative distance relations.

3. Where Are Sense data Located?

To defend his argument against sense data, Mike needs to show that there is no satisfactory answer to the question of where sense data are located. He begins by suggesting that there are **five non-arbitrary answers** to the question of where sense data are located:

- “a. Sense data have no location.
 b. Sense data are *literally* in your head.
 c. Sense data are in the same places as the physical objects that cause them. For instance, your sense datum of a table, caused by looking at a table, is located where that table is.
 d. Sense data are located wherever they appear to be.
 e. Sense data are located in an alternate space, separate from the space of physical objects.” (149)

4. Alternative 1: "Sense data Have No Location"

1. Mike's comment on the view that sense data have no location is as follows:

"This answer would appeal to those indirect realists for whom the mental phenomena in question are mental states or properties (where these are distinct from physical states, including brain states)—states which perhaps represent things in space but which are not themselves in space. However I find this answer implausible, for the following reason:

1. In perception, I am immediately aware of things with *spatial properties* (things with shapes, sizes, and spatial relations to each other).
2. Whatever has spatial properties has a location.
3. Therefore, the things I am thus aware of have locations." (150)

Comment 1: Three Parallel Arguments

As will be clear from my comments above, Mike's argument here can be paralleled by arguments dealing with **bodily sensations**, the introspection of **hallucinatory experiences**, and **dreams**.

Thus, in the case of **bodily sensations**, the argument is as follows:

1. In the case of bodily sensation, I am immediately aware of things with *spatial properties*. Thus, a tingling sensation may be in part of one finger, or in all of one finger, or in two fingers, etc.
2. Whatever has spatial properties has a location.
3. Therefore, bodily sensations have locations.

Similarly, in the case of **introspection of hallucinations**, the argument is as follows:

1. In introspection of visual hallucinatory experiences, I am immediately aware of things with *spatial properties*. Thus, for example, a dagger-like arrangement of instances of qualitative color properties has a certain shape and a certain size, and may stand in spatial relations to other hallucinated, or non-hallucinated arrangements of instances of qualitative color properties.
2. Whatever has spatial properties has a location.
3. Therefore, the arrangements of instances of qualitative color properties that one is aware of when one introspects hallucinatory experiences have locations.

Finally, the same sort of argument can be advanced in the case of **dreams**:

1. In dreams, I am immediately aware of things with *spatial properties*. Thus, a human-like arrangement of instances of qualitative color properties has a certain shape and a certain size, and may stand in spatial relations to other human-like arrangements of instances of qualitative color properties.
2. Whatever has spatial properties has a location.
3. Therefore, the arrangements of instances of qualitative color properties that one is aware of when one is dreaming have locations.

Comment 2. Spatial Relations, Locations, and Spaces

In asking about where things are located, it is important to introduce the distinction between **relational** conceptions of space, and **substantival** ones. According to the former, space is not something that exists independently of things and events of a certain sort that stand in spatial relations, so the idea of **empty space** is an impossibility. By contrast, on a substantival conception of space, space could exist even if it contained no things or events of the relevant sort: there would still be spatial locations, where there could have been things or events.

In his discussion of the location of sense data in his book, *Perception – A Representative Theory*, Frank Jackson responds as follows to an objection to his view that sense data are located in public space and time:

"Of course, many philosophers have found the idea of sense data actually *in* space mysterious (particularly if the sense data are mental, as I argue in the next chapter). But the point is rarely *argued*. And when it is, the arguments parallel those against locating bodily sensations in space which we rejected in §20 of the previous chapter. I am sometimes asked why I do not follow the lead of those who locate mental objects in a special, private space. To me, this is like saying 'I find it mysterious that mental objects are in normal space, so I will locate them in mysterious space.'" (103)

It seems to me that Jackson here is using the term "space", in the expression "mysterious space", to mean "**substantival** space". For if it is merely a relational notion of space that is involved, what is **mysterious**? On Jackson's view, one is directly acquainted with colored expanses that have **shapes**. For something to have a shape, parts of it must stand in various spatial relations to one another. When space is conceived relationally, however, the existence of spatially related items is **all there is to space**. Therefore, to be directly acquainted with items that have shapes is by that very fact to be directly acquainted with **a relational space**. So there is **no room, on a relational concept of space, for any mystery here**, unless one denies that one is directly acquainted with shapes – as Jackson certainly does not want to do.

The distinction between a substantival conception of space and a relational one immediately gives rise, in turn, to a corresponding distinction between a **substantival** conception of spatial **locations**, and a **relational** conception, and this in turn leads to the question of **which conception** Mike has in mind when he speaks of the view that sense data have no location. If "location" means "location in a relational space", then the view is clearly false: this follows immediately from the fact that visual sense data have shapes. On the other hand, if "location" means "location in some substantival space", then it may well be true that sense data have no location, since, when "location" is thus interpreted, premise 2 of Mike's argument means

Whatever has spatial properties has a location in a substantival space

– and I see no reason to think that this is true, since I see no reason to think that relational spaces are logically impossible.

In his defense of his argument, Mike Huemer says, with respect to premise 2 – that is, the proposition that whatever has spatial properties has a location:

"Premise (2) seems self-evident. If a thing has no location, that means it does not occupy space, and if it does not occupy space, then it has no size or shape." (150)

Comment

Premise (2) is self-evident only if "space" means **relational** space. The person who asserts that sense data have no locations is asserting, however, not that sense data do not have locations in **their own, relational space**, but, rather, that they do not have location in **public spacetime**.

After briefly discussing premise (2), Mike goes on to ask whether the indirect realist can argue that premise (1) is false. Mike argues that this response to the argument is unsatisfactory. In the first place, is one aware of any nonspatial entities in perception? Secondly, if sense data merely appear to have color and shape, how can they represent things that have shape? Thirdly, if Mike's account of awareness is correct, then the object that one is aware of must at least roughly satisfy the representational content, and sense data would not do this if they lacked color and shape.

Comments

(1) Mike is right in thinking that a rejection of premise (1) is not a satisfactory response to his argument.

(2) The way I would put this is that the correct way to introduce sense data is simply as states of affairs with which one is **directly acquainted**, and this entails that premise (1) is correct.

Near the end of his discussion in this section, Mike says:

"I, of course, believe in the existence of mental states called 'perceptual experiences', which, in my view, have no location⁷. Nor do I deny that we can be aware of such states, even directly aware of them (by introspection). What I deny is that I am aware of a perceptual experience *insofar as* I perceive, for example, this book." (152)

Comments

(1) The crucial question here is whether, in the case of hallucination, one is aware, **if one introspects**, of anything that has qualitative color and shape. If Mike says that one is not aware of anything that has qualitative color and shape, then he is not giving a satisfactory description of what is involved in a hallucinatory experience. But, on the other hand, if he says that, in introspection, one is aware of qualitative colors and shapes, then he faces the same type of question that he is raising for sense data: "**Where** are these shapes that one is aware of when one introspects a hallucinatory experience?"

(2) Whatever answer he gives to the latter question, **the same answer** will be equally good in the case of sense data.

5. Alternative 2: "Sense data Are in Your Head"

One way of arguing for the view that sense data are in one's head is by arguing that there are no nonphysical, concrete entities, and thus that mental items **must** be identified with things in the brain. But then one encounters the problem that when one sees a green rectangle, there **may** be nothing rectangular about the relevant brain state.

Whether or not this is so is, however, an empirical question. But if it turns out that when one sees a green rectangle, there is indeed something rectangular about the relevant brain state, one may be able to appeal instead to the idea that although that rectangular item can causally give rise to an instance of qualitative greenness, it does not itself possess the property of qualitative greenness. But this contention, too, would need to be examined more closely.

Mike's response to the latter lines of thought is as follows:

"The indirect realist might avoid this objection by holding that the sense data in my head really do have shapes and colors that I seem to perceive objects to have—that is, there is a green rectangle in my head now. This position is odd enough that I do not know whether anyone actually holds it,⁹ so I won't spend too much time on it." (153)

Comments: 1. The Relevant Concept of Color

(1) The view in question is not correctly described as the view that "the sense data in my head really do have shapes and colors that I seem to perceive objects to have" unless I am a naïve perceiver. For if I am not a naïve perceiver, the colors that objects appear to have are **dispositional** properties of a certain sort, and no sense datum theorist views sense data as colored in **that** sense.

(2) The view, then, is that the sense data in my head really do have shapes and **qualitative** colors.

Comment: 2. Spatial Locations of Sense data Versus Spatial Relations *within or between* Sense data

As will emerge later, I think that there are excellent reasons for holding that sense data are in the head. But it is an error to think that the **spatial relations** that are involved **within** sense data, or **between** sense data, logically supervene upon the **locations of** the relevant sense data.

Mike's begins by pointing out that if one attributes (qualitative) color, and shape, to sense data, one will **not be able to identify** sense data with purely physical things in the brain. But he realizes that this is not a substantial objection to the view that sense data are in the head, since one need not hold that sense data are brain states. Mike therefore concludes, with regard to this first possible argument, "With that understood, it seems that there is now no reason why sense data should be thought to be in the head." (153)

Mike therefore offers a second argument against the view that sense data are located in the head:

"Second: if visual sense data have the properties that I appear to see (e.g., "green", "rectangular"), what about tactile properties? Shouldn't we also say that when I touch something I have tactile sense data and that these tactile sense data have the properties that I appear to be feeling? I think the sense data theorist will agree. Now, when I touch the book, I seem to feel something solid ('solid' here being used in the sense of 'hard', rather than "filled all the way through")—in sense datum language, we would say I am having a sense datum of solidity. Thus, my sense datum is actually solid. So there is a solid, rectangular object inside my head. It appears when I touch the book and disappears when I stop touching it. Why doesn't it get in the way of the brain material that is actually there? The old maxim that two things cannot occupy the same space at the same time would seem to apply here. It is true that my brain is a bit mushy, so a solid object, if it wasn't too big, could push the brain material aside—but I doubt anyone believes that is what is happening." (153)

Comment

Just as instances of qualitative greenness are not properties of external objects, so instances of qualitative, felt solidity are not properties of external objects. The former are correlated with reflectance properties of external objects, and the latter with the ability of external objects to resist forces exerted on them. It is the latter property that is the property of being solid. The inference that Mike makes in the above passage in moving from "I am having a sense datum of solidity" to "Thus, my sense datum is actually solid" is, accordingly, unsound: property instances of qualitative felt solidity do not have an ability to resist forces exerted upon them, and so are not themselves solid.

6. Two Arguments for the View that Sense data Are Located in the Head

There are, I think, two plausible arguments for the view that sense data are located in the head:

1. **The Causal Continuity Argument;**
2. **The 'Form of the Relevant Causal Laws' Argument.**

In thinking about the following two arguments, it is crucial that spatial relations **within** or **between** sense data do not **logically** supervene on the locations **of** sense data or their parts. It may turn out to be the case, however, that spatial relations **within** or **between** sense data **nomologically** supervene on the locations **of** sense data or their parts, since the causal laws that link complex properties of brain states with experiences may be such that if brains states B_1 , B_2 , and B_3 cause instances I_1 , I_2 , and I_3 of qualitative color properties, then B_2 is between B_1 and B_3 if and only if I_2 is between I_1 and I_3 .

6.1 The Causal Continuity Argument

This first argument can be put as follows:

(1) Though it is not a necessary truth that causal connections and processes exhibit either spatial continuity or temporal continuity, in the actual world all causal connections and processes that have been closely studied turn out to be characterized by spatial continuity, in the sense that for any state of affairs that is a cause of some state of affairs that is not in the same location, one can find other states of affairs that are both spatially as close to the cause as one wants, and that are causally intermediate between the cause and the original effect.

- (2) Therefore, it is likely that this is so for the causal connections from brain states as causes to mental states as effects.
- (3) Therefore, since the cause is in the head, **either** the mental state must either be in the same location as the brain state that causes it, or it must be a temporally extended state, earlier parts of which are spatially as close as one likes to the brain state, **or else** there must be intervening states that are neither brain states nor mental states.
- (4) There is no reason for believing that there are causally intermediate states that are neither brain states nor mental states.
- (5) Therefore, mental states must be either where their brain-state causes are, or else arbitrarily close to those brain-state causes.
- (6) Since the brain-state causes are inside the head, the mental states that they cause must also be inside the head.

6.2 The 'Form of the Relevant Causal Laws' Argument

This argument – which was, in effect, alluded to earlier – can be put as follows:

- (1) There must be causal laws connecting brain-states as causes to mental states as effects, and there are two main possibilities with regard to the form of such laws:

Hypothesis 1: For any location, *S*, the occurrence of a brain state of type *B* at location *S* causally gives rise to the occurrence of a mental state of type *M* at location *S*.

Hypothesis 2: For any location, *S*, the occurrence of a brain state, *X*, of type *B* at location *S* causally gives rise to the occurrence of a mental state of type *M* in some mind *P* that stands in (the non-spatial) relation *R* to *X*.

- (2) Hypothesis 1 is simpler than Hypothesis 2, since the last postulates **an extra** relation *R*.
- (3) Other thing being equal, the simpler hypothesis is to be preferred, since it is more likely to be true.
- (4) Therefore, it is likely that mental states are **in the same location** as the brain states that cause them.
- (5) Therefore, it is likely that mental states are in the head.

6.3 The Location of Sense data

Both of the arguments just given are concerned with the location of **mental states**, rather than **sense data** per se. But one can now argue as follows:

- (1) The instances of qualitative color properties that are involved in visual sense data are property instances that are part of the relevant visual experience.
- (2) Accordingly, those sense data are located where the relevant experiences are.
- (3) Experiences are mental states.
- (4) Mental states have been shown to be located in the head.
- (5) Therefore, experiences, in particular, are located in the head.
- (6) Therefore, the sense data involved in those experiences must also be located in the head.

7. Alternative 3: "Sense data Are in the Same Place as the Distal Object"

Since the "'distal object' is the object that you normally think that you're perceiving" (154), this is the view that sense data are located in the same place as the object that you're perceiving.

The **first objection** that Mike directs against this view is that "two objects cannot be in the same place at the same time". (154)

Comment

The answer to this argument is that this maxim to which Mike appeals applies only to material objects. The reason is that the maxim is true only because material objects are mutually impenetrable. Gravitational and magnetic and electrostatic fields, on the other hand, are not impenetrable, and so they can perfectly well be in the same locations at the same times, and they can also be in the same locations as material objects. Similarly, there is also no reason why instances of qualitative properties cannot have the same location as material objects.

Mike's **second objection** is that when this view is applied to cases where one is seeing very distant objects – such as the stars – a serious problem arises:

"Consider a further consequence. I go outside at night with my eyes closed. I turn my head skyward and then open my eyes. At the instant my eyes open or very shortly thereafter, I have an experience of seeming to see thousands of stars. If this involves my having sense data, and the sense data are located at the surfaces of the distal objects causing them, then what happens in that instant is that thousands of my sense data are 'transmitted', so to speak, to various places across the galaxy, some of them thousands of light-years from Earth. All that is proximately caused, since my experience is proximately caused, by the electrochemical reactions in my brain." (154)

4. Mike develops this objection as follows:

"We have 'established' that an instant after I open my eyes, the events going on in my brain cause a sense datum to appear at the location of a star thousands of light-years away. These two events are certainly outside one another's light cones (nothing traveling at or below the speed of light could get from my brain to the star in the instant it takes for me to have the experience). Thus, according to relativity theory, there is no objective time ordering to the events. But this is inadmissible for the sense datum theorist. He needs the sense datum's appearance to happen at the same time as, or very shortly after, the brain events, since the sense datum is supposed to exist during precisely the time I have the experience of seeming to see a star. Thus the present version of the sense datum theory is incompatible with the theory of relativity." (156)

Comment

A somewhat simpler way of setting out this objection is as follows:

- (1) Given how sense data are defined, they are part of an experience, and so exist at the same time as the relevant experience.
- (2) If the sense data exist at the time when one is having the relevant experiences, and if they also exist where the star is, then the causal process by which brain states give rise

to experiences involving sense data must traverse a distance of a thousand light-years in a very brief period of time.

(3) Therefore, if the sense data exist where the star is, the relevant causal process must traverse a distance of a thousand light-years in a very brief period of time.

(4) Such a causal process would be faster than the speed of light.

(5) Therefore, if the sense data exist where the star is, the relevant causal process must travel faster than the speed of light.

(6) If the special theory of relativity is true, it is impossible for any causal process to travel faster than the speed of light.

(7) Therefore, if the sense data exist where the star is, the special theory of relativity is false.

Mike's **third objection** focuses upon the case of dreams and hallucinations:

"Consider dreams and hallucinations. In these cases, there are no distal objects, so no places for the sense data to be located, according to the present theory. Yet the indirect realist would be hard pressed to deny that sense data exist in these cases. After all, hallucinations are one of the central kinds of phenomena that sense data are supposed to explain." (156-7)

Mike considers the idea that one can assign a different location to sense data in the case of hallucinations from the location in the case of veridical perception. He points out that this is inconsistent with the idea that hallucinatory experiences can be identical in all respects to non-hallucinatory experiences.

The **fourth objection** that Mike raises to the view that sense data are located where the distal object is located is that one's experience is caused by innumerable states of affairs that lie between the object that one perceives and one's perceptual experiences, so that it is arbitrary to locate the sense data where the perceived object is. Moreover, the sense data would be precisely the same if the initial part of that causal chain had not existed. (157)

A **final objection** is that the brain state that causes the experience, and hence the sense datum, does not contain any state of affairs that serves to specify **the distance of the perceived object** from the perceiver, and so **no possible causal law** linking the brain-state as cause to the sense datum as effect could bring it about that the sense datum is located where the perceived object is located. (157)

8. Alternative 4: "Sense data Are Wherever They Appear to Be"

This view is Frank Jackson's view. Mike's initial comment on this view is as follows:

"This answer is the most natural one, if you're going to grant spatial properties to sense data at all. If sense data have the shapes, colors, and other properties that we seem to perceive, why not also the positions?" (157)

Comment

The issue is a controversial one, but I think that there are good reasons for treating distance differently from color and shape. One reason is this. Position involves **distance from something**. To be directly acquainted with an instance of a relation, however, one must be directly acquainted with **all** of the entities that enter into that instance of the relation. But one is **not directly acquainted** with **the something** that different sense data are claimed to be different distances from. Accordingly, since one is not directly acquainted with one of the relata, the distance to a sense datum from that object cannot be an object of direct acquaintance.

Mike's **main objections** to this view concerning the location of sense data focus upon the cases of **dreams** and **hallucinations**. **One objection** concerns the case where one has a dream about a non-existent place, since then it is impossible for the sense data to be where they seem to be. But here it might be argued that in a dream the sense data appear to be in front of one, and that that is where they are, rather than in the imaginary place where you are dreaming that you are.

Mike's **next objection** involves the case of a brain in a vat, and here the point is that while, when one is not a brain in a vat, one can describe a sense datum as being in front of one, since one then has experiences of one's body, this is not possible if one is a brain in a vat, since then one has no experience of a body:

"The essential problem here is that, in certain cases, there could be *no such thing* as the place where a sense datum appears to be, even when the alleged sense datum would have to be one with spatial properties. Of course, to the brain in a vat, it appears that the unicorn is somewhere. But there is no real place such that the unicorn appears to be in that place. And so the answer, 'Sense data are in the places where they appear to be,' does not work." (159)

9. Alternative 5: "Sense data Are in Phenomenal Space"

Mike describes this view as follows:

"Our fifth and final form of indirect realism holds that sense data exist in an alternate space, separate from the space that physical objects occupy. The laws (if any) that apply to this alternate space may differ from the laws of physical space. For instance, there may be no problem with transmitting influences faster than the speed of light in the alternate space, the alternate space may be Euclidean and unaffected by gravitational fields, and so on. We can call this alternate space 'phenomenal space' to distinguish it from physical space." (159)

Mike immediately goes on to say:

"There are interesting questions about phenomenal space: is there only one phenomenal space, or does every observer have his own, separate phenomenal space (the latter answer could explain why we can only perceive our own sense data)? Do tactile and visual sense data occupy the same phenomenal space? What about sounds and smells, which often appear to have the same sort of location? These are all questions we would want to pursue if we believed in phenomenal space." (159-60)

Comments

(1) In the case of this final alternative, there are really two very different alternatives, depending upon whether one has in mind the concept of a **relational** space, or the concept of a **substantival** one.

(2) This, in turn, may seriously affect the cogency of a given objection.

(3) The "interesting questions" that Mike mentions are not interesting if one has in mind a relational conception of space, because the answers are then straightforward. Thus, on a relational conception of space, sounds and smells will belong to the same space only if smells stand in phenomenal spatial relations to sounds, which they do not. Similarly, there could be a single phenomenal space for different observers only if there were, for example, phenomenal spatial relations between the instances of qualitative colors with which different people are directly acquainted, which there are not.

(4) Since the questions only seem interesting if one adopts a substantival conception of space, it seems likely that that is what Mike himself has in mind here.

Mike advances **three objections** against the view that sense data are in phenomenal space:

(1) This view conflicts with the special theory of relativity.

(2) There is a problem about the causal relations between physical states of affairs and sense data, so conceived.

(3) There is a problem concerning the location of sense data in phenomenal space.

9.1 Objection 1: This Theory of Sense data Conflicts with the Theory of Relativity

Mike offers the following summary of this first objection:

- "1. According to relativity, space and time are not two separate things; there is only the single, four-dimensional manifold, 'spacetime'.
2. So, according to relativity, no event can be temporally related to a physical event without being spatially related to it.
3. According to the theory of phenomenal space, sense data are not spatially related to physical objects/events.
4. But, according to the same theory, sense data are temporally related to physical objects/events.
5. So the theory of phenomenal space conflicts with the theory of relativity." (160)

Comments

(1) The proposition contained in the conclusion at (2) – that is, the proposition that no event can be temporally related to a physical event without being spatially related to it – is incompatible with Mike's view of perceptual experiences, since Mike holds both that perceptual experiences are caused by brain states, and that they do not have any spatial locations. This first objection may, of course, nevertheless be effective as *an ad hominem* objection, in the case of those who accept the special theory of relativity.

(2) Premise (3) is true in virtue of the way that Mike defines this fifth alternative. Because of this, however, there is another alternative that is closely related, and that is suggested by the earlier distinction that I drew between **the locations of sense data**, on the one hand, and **spatial relations within or between sense data**, on the other:

Alternative 6: The Existence of Sense data Involves Two Different Spaces

1. Visual sense data are located in the spacetime of physics.
2. The reason is that all mental states are located in the spacetime of physics, and visual sense data consist of instances of qualitative colors, which in turn are part of visual experiences.
3. Those instances of qualitative colors in turn have shapes, and stand in phenomenal spatial relations to other instances of qualitative colors.
4. Those spatially related qualitative color instances constitute a phenomenal space.
5. Such phenomenal spaces are purely relational. In the case of vision, it is not possible for such a space to exist in the absence of all instances of qualitative color properties.

Comments Continued

(3) This alternative theory is not open to the present objection, since according to this view, sense data have location in the spacetime of physics.

9.2 Objection 2: A Problem Concerning Causal Relations between Physical Events and Sense data

This second objection can be developed as follows:

"I turn now to the second problem for phenomenal space, a problem concerning the causal relations between events in physical space and events in phenomenal space. As noted, there must be such relations, because sense data are held to be produced by the interaction of physical objects with our sense organs and brains. At the same time, there are no spatial relations between physical objects and sense data, even though both have spatial properties—a sense datum cannot be next to a physical object, inside a physical object, four feet from a physical object, etc."

"One objection to this involves a metaphysical principle of 'local causality'; this is the principle that an object cannot act *directly* on another object unless the two come into contact"

" . . . I can affect an object only by (a) coming into contact with it, (b) coming into contact with something else that it is in contact with it, (c) sending something (an object, a signal, or in general, something that carries my influence through the intervening distance) that travels through the space between me and the object, or some combination of these (including sending something that comes into contact with another thing that then comes in contact with the object, etc.). Any way I do it, there has to be a spatiotemporally continuous sequence of causally connected states or events stretching from me to the object I am affecting." (163)

Mike points out that there are two objections to such a principle of local causality. The first is that "even if one is not a representationalist, one might hold that (at least some) mental states are caused by brain states but that (at least some of these) mental states do not have spatial locations . . ." (164) (We saw earlier that Mike holds that perceptual experiences do not have spatial locations.) The second is that the experiments connected with Bell's Theorem appear to show that there can be instantaneous action at a distance. (164)

Mike says that one can answer the first objection by replacing the principle of local causality by a modified version. It appears that the modified version that he has in mind is something along the following lines:

If events *C* and *E* both have spatial locations, and event *C* causes event *E*, then there must a continuous causal process connecting event *C* to event *E* in virtue of which event *C* causes event *E*.

Comments

(1) The modified principle appears *ad hoc*. For if one event can cause another without there being any continuous causal process connecting the two events when the reason is that **one event has no spatial location**, why should it not be possible for one event to cause another without there being any continuous causal process connecting the two events when the reason is instead that **the events belong to different spaces?**

(2) As was the case with the first argument, even if this argument were successful against the view that sense data are located in a phenomenal space, **and only in a phenomenal space**, it would not have any force against the closely related view according to which sense data have locations in the spacetime of physics, but also have spatial properties and stand in spatial relations in a purely relational, phenomenalist space.

9.3 Objection 3: A Problem Concerning Causal Relations between Physical Events and Sense data

This third and final objection is as follows:

"We turn, then, to the third objection to phenomenal space, the objection that I think is the strongest. According to this third objection, if there were such a thing as phenomenal space, there would be no reasonable answer to the question of where in phenomenal space a particular sense datum would appear. In outline, my argument will be as follows:

1. Whenever a cause produces an effect, either the location of the effect is random, or it is determined in accordance with some law or laws of nature.
2. Laws of nature can always be formulated in terms of general characteristics and relationships.
3. Therefore, when a cause produces an effect, either the location of the effect is random, or there is some general relationship that the location of the effect uniquely bears to the cause. (from 1, 2)

4. If phenomenal space exists, there is no general relationship that a location in phenomenal space uniquely bears to any physical state or event.
5. If brain states produce sense data, the locations of the sense data are not random.
6. Therefore, brains states do not produce sense data in phenomenal space. (from 3, 4, 5)" (164-5)

A crucial point in this argument is step (4). Here is what Mike says about this step:

"Step 4: I am assuming here that phenomenal space is intrinsically homogeneous – that is, other than the different sense data that may be at different places, one location in phenomenal space is just like any other location in phenomenal space. Furthermore, no location in phenomenal space is related, spatially, to any location in physical space (that is, it is not at any distance, nor in any direction, from a location in physical space); this is the whole point of calling it a separate space. Thus, it seems that, when a physical event occurs a certain location in physical space, that physical event is related in exactly the same way (which is to say, apparently, in no interesting way) to any given location in phenomenal space as it is to any other location in phenomenal space." (167)

Comments

- (1) As the immediately preceding quotation makes clear, this argument assumes that phenomenal space is **substantival**, since it assumes that locations in phenomenal space are **intrinsically** homogeneous. But if phenomenal space is a relational space, while one can talk about locations in the case of a relational space, one cannot speak of them as having **intrinsic properties**.
- (2) The upshot is that although this third argument does, it seems, tell against the view that sense data are located in a phenomenal space, **and only in a phenomenal space**, it does not have any force against the closely related view according to which sense data have locations in the spacetime of physics, and also have spatial properties and stand in spatial relations in a **purely relational**, phenomenalistic space.
- (3) The reason it does not is as follows. First, there can be causal laws linking brains states at given locations in the spacetime of physics to sensory experiences at appropriately related locations in the same spacetime. Second, the **total** brain state in a given region can causally determine the **total** sensory experience in the corresponding region. There is, accordingly, no possibility that the sense data that result when one looks, for example, at something red that is between an orange thing and a green thing, will consist of a green sense datum between a red sense datum and an orange sense datum.
- (4) Finally, while it is true that **if** there were a **substantival** phenomenal space, there would be different possibilities as to where in that substantival space the array of sense data were, given that the phenomenal space is a relational space, nothing relevant exists other than the correct array: there aren't different possibilities as to where that array winds up, since that only makes sense when points in the space are themselves real.

10. Summing Up: Spatial Relations, Locations, and Sense data

What has emerged is that two distinctions are crucial for a satisfactory approach to questions concerning sense data, spatial relations, and locations.

(1) The first distinction is that between (a) **the locations of sense data**, and (b) **spatial relations within and between sense data**.

(2) The second distinction is that between (a) **purely relational spaces**, and (b) **substantival spaces**.

When these distinctions are in place, one can see that the five alternatives that Mike Huemer considers do not exhaust the range of alternatives. In particular, there is the following alternative:

Alternative 6: The Existence of Sense data Involves Two Different Spaces

1. All mental states, including experiences are located in the spacetime of physics.
2. The instances of qualitative color properties with which visual sense data are identical are part of visual experiences.
3. Therefore, **sense data have locations in substantival, physical space**.
4. Moreover, they are located where their immediate causes are located.
5. Since their immediate causes are brain states, sense data are located in the head.
6. But instances of qualitative color properties have shapes, and stand in phenomenal spatial relations to other instances of qualitative color properties.
7. Therefore, **sense data are also in a phenomenal space**.
8. But that space is **purely relational**, not substantival: it is not possible for such a space to exist in the absence of all instances of qualitative colors.
9. The phenomenal spatial relations within and between sense data do **not logically supervene** upon the locations of those sense data, and their parts, in physical space.
10. The phenomenal spatial relations within and between sense data do, however, **nomologically supervene** upon the locations of those sense data, and their parts, in physical space.

All of the claims involved in this final alternative are, I think, plausible, and not open to any of the objections that Mike advances against the five alternatives that he considers.