

Review of Sydney Shoemaker's Physical Realization

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Physical Realization

Sydney Shoemaker

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In *Physical Realization*, Sydney Shoemaker argues that all properties, including phenomenally conscious properties that feature in our cognitive activities, are realized in microphysical states of affairs or properties. It is the purpose of *Physical Realization* to provide an account of realization “and to discuss [its] bearing on a number of central topics in metaphysics and philosophy of mind” (p. 4). This book consolidates many of the themes found in Sydney Shoemaker’s work over the past quarter of a century, including his work on properties, coincident objects, essentialism, material constitution, and persistence through time, and culminates in a systematic overall metaphysical framework.

After rationally distinguishing the mind and body as two essentially different substances, Descartes found it difficult to reconcile their causal interaction. A similar problem confronts non-reductive physicalists who eschew both substance dualism and reductive physicalism. The problem confronting non-reductive physicalism finds expression in Jaegwon Kim’s “exclusion argument” (Kim, 1993, 1998, 2005). The argument employs an exclusion principle to the effect that there cannot be two distinct and fully sufficient causes for a single event unless it is genuinely overdetermined. Further, non-reductive physicalism states that any mental property M , must be realized by a physical property P , even though it is not identical to this physical property. M cannot be identical with P because typically it will be realized by many different physical properties. But now if the mental property M is taken to cause a physical property P^* , we seem to have a case where both the mental property M , and its realizing physical property P , seem to qualify as the cause of the physical effect P^* . The exclusion argument consequently generates a dilemma for the nonreductive physicalist. If M and P are held to be distinct, then there is no causal work left over for M to perform: P is already sufficient for P^* and so M ’s causal efficacy is pre-empted by P . This horn of the dilemma leads to epiphenomenalism. The other horn of the dilemma is that if both M and P are distinct and fully sufficient for M^* , then there exists a highly unlikely pervasive causal overdetermination.

In this challenging but rewarding book, Shoemaker intends to demonstrate how the realization of mental properties by physical properties can avoid (a) the causal pre-emption of realized properties by realizer properties, and (b) an “objectionable sort of overdetermination” by both realizer and realized properties (pp. 4-5).

After a short introduction, Shoemaker sets about formulating his account of physical realization in chapters 2 and 3. He claims his account is a version of the higher-order account of realization, where a higher-order property is the property of having a lower-order property that meets a certain condition, but adds to this by specifying more precisely what the condition is. The certain condition is that the forward looking causal features of the lower-order realizer property include as a subset the forward looking causal features of the realized property, and that its backward looking causal features are a subset of those of the realized property. For example, a bullfighter’s cape has the higher-order property of being provocative by virtue of having a lower-order property of being red. The property of being provocative has forward looking causal powers (such as causing bulls to charge) that are a subset of the causal powers of the property of being red. Conversely, the backward looking causal features of being provocative include the backward looking causal features of being red, since the provocativeness of the cape could also be realized by being pink or orange, where these alternative realizer properties will typically have different causes from being red. Because of the inclusion relations involved, Shoemaker calls his account a “subset account” (p. 12).

Shoemaker notes that on one view, a higher-order property is a logical construction, constructed by a disjunctive list of its possible realizers and therefore, is “not the sort of property that could enter into causal laws or have causal efficacy in its own right” (p. 17). Shoemaker’s version is not vulnerable to this objection because it explicitly assigns a causal profile to the realized property, namely that the realized property’s forward looking causal features are a subset of the forward looking causal features of its realizer property; also, the realized property’s backward looking causal features have as a subset the backward looking causal features of the realizer property. Since the causal powers of one property are a subset of the causal powers of the other property, the two properties are not identical. Therefore, on this account, higher-order properties have their own distinctive causal profiles, which are not pre-empted by their realizer properties.

Since property realization only accounts for the realization of macroscopic properties by other macroscopic properties, a physicalist who assumes that all instantiations of properties in macroscopic objects are realized in microphysical states of affairs needs an account that “gives a role to the properties of micro-entities and other parts of macroscopic objects”(pp. 32-33). But this presents a problem because the same microphysical state of affairs minimally realizes more than one property. For example, the same microphysical state of affairs realizes distinct properties of me, such as my height and girth. This problem can be overcome by observing that in the case of my height and girth, the micro-entities distributed on the vertical plane are more relevant to my height than those distributed on the horizontal plane, and vice versa. These relevant micro-entities will constitute a microphysical state of affairs that can be considered the “core” realizer of a particular property. When the causal profile common to members of a “type” of microphysical states of affairs is isomorphic with the causal profile of certain properties instantiated by an object, this will enable the pairing of those properties with those types of states of affairs. They will be related to

each other by way of the subset relation outlined earlier. Having causal powers that are a subset of its realizer microphysical state of affairs, the realized property is not part of an overdetermining cause for an effect. Shoemaker likens the situation to a firing squad where the salvo of shots kills Smith, but the only shot that hits Smith is fired by Jones. Both the salvo of shots and Jones' shot can be said to cause the death. However, "this is not overdetermination of an objectionable sort" (p. 53).

Shoemaker moves on in chapter 4 to address other issues relating to realized properties. He puts forward the view that functional properties are intrinsic properties and the causal powers of all properties are essential, arguing there is no ontological distinction to be made between functional and non-functional properties. Rather, the distinction is a conceptual one. The purpose of the argument is to overcome a problematic implication of a functional account of the mind. This account defines functional properties by their causal roles in such a way that they have those roles essentially combined with the view that intrinsic properties have all of their causal features contingently. So by stipulating that psychological terms only refer to properties with certain of their causal features essentially, the functional account may result in our mental terms not referring, since for all we know the only property that has these causal features is one that does not have them essentially (p. 60). He then considers the problem of phony properties: When does a disjunction of properties constitute a genuine higher-level property? By distinguishing properties by means of their causal profile, Shoemaker claims that a genuine higher-level property will be one with its own distinct causal profile. A phony property will have a causal profile that is identical with the disjunct that is instantiated on any particular occasion, thus lacking its own causal profile.

Chapter 5 deals with some related metaphysical issues. If persons and their bodies are coincident entities, the psychological properties of persons may fail to supervene on the physical properties shared by persons and bodies, since such shared properties (such as C-fiber stimulation) are too thin to realize the psychological properties of persons and to ground the persistence conditions of persons. This difficulty is overcome by combining the shared properties with sortal properties and allowing the conjunction to realize properties of the person. He also claims his view presents perdurance theories of persistence with a problem. If the temporal stages of a continuant are like the spatial stages of a road, then those temporal stages must entail states of affairs extended in time in order to count as temporal stages of a persisting thing. This is because the spatial stages of a road must entail the existence of spatially extended states of affairs in order to constitute a road. If a cross section of space is to count as a cross section of road, then there must be a substantial portion of space that includes the location of the cross section as a proper part (p. 99). A perdurantist who accepts this is accepting the endurantist view that a thing is wholly present at each moment of its existence.

Perhaps the most interesting insight comes in the final chapter, where the physical realization of qualia is discussed. Working with the assumption that if physicalism is true, then qualia must be realized in microphysical states of affairs, Shoemaker attends to filling in this account. In agreement with Kim, he accepts that qualia, being intrinsic properties, are not functionally definable because of the possibility of qualia inversion. But contrary to Kim, believes that this does not preclude their causal efficacy or their being physically realized. Firstly, functional definitions of mental properties involving Ramsey sentences do not capture the complete causal profile of a property. Since such definitions do not make reference to

the physical states of an organism that stand in causal relations with the psychological states defined, there is more to the causal profile of a property than a functional definition can capture. Secondly, there are qualitative differences and similarities between the intrasubjective experiences of a person that lead to either discriminatory or recognitional behavior respectively. These differences among experiences are functionally definable and qualia, being the properties of such experiences, must contribute causally to these different kinds of behavior. Therefore, it is in virtue of the qualia that experiences have that those experiences play the causal role they do.

Shoemaker puts forth interesting proposals that will no doubt be the focus of much contention and dispute. One contentious issue concerns whether he is successful in avoiding Kim's exclusion argument. In trying to avoid the unwanted conclusions of the exclusion argument, Shoemaker has not remained faithful to non-reductive physicalism as it is usually conceived. Instead, he has, in effect, made mental properties physical by proclaiming that their causal powers are a subset of those of their realizing physical properties or microphysical states of affairs. Most non-reductive physicalist's assert that mental properties, qua mental, have distinctive causal powers. Shoemaker at most shows how mental properties, qua special kinds of physical properties, have distinctive causal powers. One might wonder whether in trying to escape Kim's reductio he has abandoned the most important aspects of non-reductive physicalism. Overall though, the difficulty and intricacy of this book is more than compensated for by the innovative approach it takes to issues that continue to be much debated.

References

- Kim, J. (1993). *Supervenience and Mind*. Cambridge, UK: Cambridge University Press.
_____. (1998). *Mind in a Physical World*. Cambridge, MA: MIT Press.
_____. (2006). *Physicalism, or Something Near Enough*. Princeton: Princeton University Press.