

## **Critical Notice of Jaegwon Kim's *Supervenience and Mind***

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Jaegwon Kim has certainly done the most important work on supervenience. Further, he has proposed the most influential account of the nature of events. And since many (Kim included) hold that mental events “supervene upon” physical events, it is no surprise that Kim’s work on events and supervenience lead directly into the philosophy of mind; more specifically, Kim’s work leads directly into the topic of mental causation, which, according to Kim, is the central question in philosophy of mind (xv). In *Supervenience and Mind*, these and related issues are addressed with clarity, originality, and power.

Excepting the preface, a very helpful index, and two postscripts (one on supervenience and one on mental causation), all of the material in this book is available elsewhere. However, it is useful to have Kim select for us those papers that, presumably, he takes to be his eighteen most important on these topics. Many issues are addressed in these essays: various concepts of supervenience and how they relate one to another (Essays 4 and 5); the claim that only the very strongest sort of supervenience is sufficient to capture the kind of dependency supervenience is typically thought to involve (143ff); supervenience applied to multiple domains (Essay 7); Davidson’s work on events and the philosophy of mind (Essays 3 and 11); Quine’s goal of epistemology “naturalized” (Essay 12); and much more.

But rather than discuss the various essays individually, I will focus my comments on a few principles that appear and reappear throughout the book, and on which Kim’s

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most interesting arguments rely. (Although written over the course of twenty years, the essays are surprisingly unified.) These principles, sometimes appearing in slightly varying forms and not necessarily bearing the names I give them, underlie the metaphysical picture that begins to emerge when all of the essays are read together. And because these essays taken together lay the foundation for an ambitious metaphysics, the whole of this book is more interesting and impressive than the sum of its parts.

One principle that plays a central part in Kim's arguments is:

**Criterion of Reality** To be real is to have causal powers (269, 270, 287, 348, 350).

Since many different kinds of things are real, many different kinds of things must have causal power. In the opening remarks of Essay 6, Kim briefly discusses differing views on the causal efficacy of, among other things, time slices, fire, and God. He also has extended discussions on events and properties as causal relata (Essays 1 and 14, respectively). Presumably, what it is for one kind of thing, such as an object, to have causal power, is different from what is for another kind of thing, such as an event. But, except for events and properties, Kim does not address the differences between the causal power of one sort of thing and the causal power of another. Fortunately, these are not details that need concern us here. What matters is that the Criterion of Reality must be understood so that all kinds of entities are supposed to fall within its purview.

Two other principles are:

**Causal Exclusion Principle** For each event, there is at most one complete and independent causal explanation (239, 250ff).

and

**Causal Closure Principle** The physical universe is causally closed, i.e., every physical event that has a cause, has a complete causal explanation in terms of another physical event (280-281).

These three principles generate Kim's attack on nonreductive materialism—the doctrine that every particular is physical, yet mental events cannot be reduced to (or

identified with) physical events. (Kim does not distinguish between reducing a mental event to a physical event and identifying a mental event with a physical event.) Kim argues: Every physical event (such as my arm's moving) has a complete and independent physical cause (Causal Closure Principle); if a physical event has a physical cause, then it cannot have a distinct mental cause (Causal Exclusion Principle); therefore, either mental events (and properties) must be reduced to (or identified with) particular physical events (and properties), or they exercise no causal influence on the physical world.

Kim also argues along similar lines that only mental events (properties) which are reduced to (or identified with) physical events (properties) could causally influence other mental events (properties). The argument involving mental-mental causation has, in addition to the premises used in the argument about mental-physical causation, the premise that psychophysical supervenience is true, i.e., that the mental supervenes on the physical (this premise is defended in Essay 10).

So, according to Kim, if mental states are to exercise causal power either on other mental states or on physical states, then mental states must be reduced to (or identified with) physical states. If mental states are not so reduced, then they have no causal powers, and, by the Criterion of Reality, do not exist. If one wants to be a materialist (which, for Kim, entails endorsing the Causal Closure Principle), then one must either reduce mental states to physical states, or eliminate them altogether (267). (In addition to arguing for reductive materialism in this manner, Kim also spends a fair amount of time defending the view against functionalist objections (Essay 16).)

Not only do all events have causes that can be explained wholly in physical terms (Causal Closure), but all causal relations that seem to involve the macrophysical world supervene on causal relations involving only microphysical entities. Says Kim: "causal relations among macroevents and macroproperties must hold in virtue of (and therefore be explicable in terms of) causal relations holding for events and properties at a more basic level. This is only a special case of the general thesis that all the facts about the

world supervene on microphysical facts” (358-9; Cf. 148, 255).

The privileged status of the microphysical world, for Kim, derives from the fact that, in general, a lower level (such as the microphysical) is more basic than a higher level (such as the macrophysical). We see this in Kim’s rejection of the possibility that there are “causal powers that magically emerge at a higher level and of which there is no accounting in terms of lower-level properties and their causal powers and nomic connections” (326).

So all causal powers on a higher level must supervene on causal powers at a lower level. But Kim also argues that supervening causal powers must be reduced to those of the lower level. Kim thinks that all events in the world can be causally explained in the terms of microphysics, and since, by Causal Exclusion, there can be only one causal explanation of each event, all causal powers need to be reduced to those of microphysics. Kim says “Causal relations that resist microreduction must be considered ‘causal danglers’, which, like the notorious ‘nomological danglers’, are an acute embarrassment to the physicalist view of the world” (100). For this reason, Kim calls macrocausation “epiphenomenal” (Essay 6 and 282).

So we see a fourth principle that Kim endorses:

**No Irreducible Causal Powers** All the causal powers of any object, event or property are reducible to lower level causal powers (unless, of course, there is no “lower level”).

Note that Kim makes use of two sorts of reductions: one involving events or properties; and the other involving causal powers. The exact relation between these two is not obvious, but it should be clear that they are closely related. After all, it seems fair to construe Kim’s argument for reductive materialism along the following lines: if a mental state’s causal powers are reducible to that of a physical state, then the mental state itself is reducible to that physical state.

And now we can see that Kim’s principles lead to reduction in areas other than the philosophy of mind. The epiphenomenal nature of macrocausation, combined with

the Criterion of Reality, entails that physical objects (such as human bodies) either do not exist, or must be reduced to (identified with) their microphysical constituents (355). If a body's causal powers are reducible to the causal powers of a swarm of atoms or whatever (more below on "whatever"), then, Kim should insist, the body must be reducible to (identifiable with) that swarm of atoms. The same points apply, mutatis mutandis, to properties and events (weighing so many pounds might be reducible to having various parts that weigh so much; my arm's moving might be reducible to the compound movements of the various parts of my arm. (99)) So we have learned something important: the premises Kim relies on in arguing for reduction in the philosophy of mind are so strong that they generate reduction not only of mental events, but also of macrophysical objects and events and properties.

Is there anything unseemly about reducing not just the mind, but the body as well? Maybe so, since this sort of reduction might amount to elimination. Kim's principles seem pretty clearly to entail the following disjunction: either there are no human bodies (instead there are only the atoms or whatever that seem to compose human bodies); or there are human bodies, but a body is identical with a particular swarm of atoms (upon which the causal powers of the body supervene). The former option is clearly eliminativist. And the only way the latter option does not collapse into the former is if swarms of atoms are physical objects in addition to the atoms. But then it seems that we could apply Kim's principles to swarms; and, since all the causal explanation necessary is provided by the collective activity of the individual atoms, swarms turn out not to have their own causal powers, and thus don't exist.

So it could be that Kim must eliminate all macrophysical objects just like Peter van Inwagen eliminates artifacts (there is no desk, according to van Inwagen, but instead only simples that are "arranged desk-wise"; we shall see below that Kim may even be forced into endorsing the existence of simples, thus making his position still more like van Inwagen's). This line of thought may strike many as an objectionable slide from

reduction to elimination; interestingly enough, however, Kim's closing remarks in the "Postscripts on Mental Causation" evidence some sympathy for such a slide, at least in the philosophy of mind.

Suppose that every object (or event or property) inherits its causal powers from lower level objects (or events or properties). Each object, event, or property, is, by the Criterion of Reality and No Irreducible Causal Powers, thereby reduced to the lower level objects, events or properties upon which it supervenes. Here an interesting question arises: how far down must one go to reach an event, property, or object that is not reduced to lower level members of its own kind?

There are two possibilities here. Either there is a bottom level for each sort of entity or there is not. Let's take the first possibility first.

It would be surprising to find, I think, that for each sort of entity there is some basic level: fundamental events, fundamental properties, and fundamental particles—metaphysical simples. And it is at least out of step with Kim's allegiance to physics as the most basic science that it is the philosopher, and not the physicist, who discovers that matter is not infinitely divisible (i.e., that there are metaphysical simples). And if the sort of reductionism at issue in all these cases does amount to eliminativism, we are left with a world of only simples and the sorts of events and properties that would, I imagine, seem quite foreign to us. (Needless to say, such a world would be one in which we do not exist.)

Suppose instead there are no metaphysical simples. Given No Irreducible Causal Powers, the causal powers of the entities on each level (and therefore their existence) are reduced to, and explained in terms of, those of the next level down. But, if we descend level after level without end we never get a causal power or entity that is real in and of itself and that can support all the levels above it. Such an infinite regress is surely vicious (the same regress applies, not just to objects, but to events and properties).

So how might one avoid this dilemma—this choice between vicious regress and a

priori arguments for simples, ultimate properties, and ultimate events? Only, it seems, by rejecting one of the principles that give rise to it: the Criterion of Reality and No Irreducible Causal Powers.

We should note that rejecting either of them will undercut Kim's argument against nonreductive materialism. This is easy to see in the case of the Criterion of Reality, since that principle was explicitly used in the argument. And if we reject No Irreducible Causal Powers, then we are faced with rejecting one of the premises that led to it. The first, Causal Exclusion, is of course necessary to Kim's attack on nonreductive materialism. The second assumption was that the casual powers of an object (event, property) at one level supervene on the causal powers of objects (events, properties) at a lower level. But if we reject this assumption, then it is hard to see why we should accept psychophysical supervenience, which is, after all, merely a special case of this more general principle. If psychophysical supervenience goes, so does the argument against nonreductive materialism. Since rejecting any of the premises that led to the dilemma would undercut Kim's argument against nonreductive materialism, which is a centerpiece of Supervenience and Mind, I think that Kim would find any such rejection unacceptable.

Maybe there is another way to avoid both the dilemma presented above and the charge that Kim does away with the entire macrophysical world. And we find some surprising remarks in the preface of Supervenience and Mind that might indicate how Kim would respond. Kim says:

Concerning such questions as whether there “really are” events (over and beyond substances and their properties), whether substances are “ontologically prior to” events or vice versa, what the “metaphysical nature” of events is, along with many other similar questions about facts, properties, continuants, time-slices, and so forth, it just seems wrong-headed to think that there are “true” answers, answers that are true because they correctly depict some pre-existing metaphysical order of the world. I think that the heart of ontological inquiry lies in construction rather than description. (ix)

(Kim goes on to note that this is not his view about “metaphysics in general” or even

about “all ontological issues”.) Kim doesn’t develop these views, and it will be interesting to see whether, when developed, they can support the claim that there is no fact of the matter as to whether an entity is simply reduced to what constitutes it, or instead exists “over and beyond” what constitutes it. If this could be done, perhaps there is a way to answer, or at least avoid, the kinds of challenges I have been raising.

But even if the sort of conventionalism suggested here would help with these challenges, is it plausible? I don’t think it is, and, much more importantly, I don’t think this conventionalism sits well with other claims Kim himself endorses. He does confess that

[My] realism about explanation [according to which there must be an objective basis, outside our system of beliefs, that makes correct explanations correct, and that separates true understanding from the illusory kind] contrasts with a broadly ‘constructivist’ stance on ontology that I expounded above in connection with event theory. (xii)

But I think there is more here than a mere “contrast”. Suppose that the causal powers of an event supervene upon (and, by No Irreducible Causal Powers, are reducible to) the powers of its constituent substance and property; by Kim’s principles, then, this event does not exist over and above the substance and property. Suppose, instead, that the event has causal power in its own right; by Kim’s principles, that event must exist; there “really is” such an event (256). Similarly, either macrophysical objects have irreducible causal powers or they don’t (Kim, of course, says they do not). If they do not, then, by Kim’s principles, it follows that they do not exist “over and beyond” their parts that do have irreducible causal powers.

It would not help to claim that there is no fact of the matter as to whether it is the event, rather than, say, the substance and the property, that exercises causal power. For then there would be no fact of the matter as to what is the real causal explanation of some other event. But that again is inconsistent with Kim’s explanatory realism (and would of course undermine Causal Exclusion). So I think that Kim cannot consistently maintain



his constructivism if we assume that the principles we have been considering are, according to Kim, straightforwardly true, and not themselves merely matters of useful construction. And this is, I think, a safe assumption; after all, these principles are why he rejects nonreductive materialism—a view Kim thinks is false, not just inelegant.

In Supervenience and Mind, many issues central to metaphysics and philosophy of mind are addressed. Not only are the topics of central importance, but the carefully constructed arguments are first-rate. The questions I have raised above notwithstanding, this collection of articles is very highly recommended.