

The Supervenience Argument Against Non-Reductive Physicalism

Kim, Jaegwon. *Mind in a Physical World*. Cambridge: MIT Press, 1998.

Kim, Jaegwon. *Physicalism, or Something Near Enough*. Princeton: Princeton University Press, 2005.

See also:

Heil, John, and Alfred Mele, ed. *Mental Causation*. Oxford: Clarendon Press, 1993.

Worries about mental causation are prominent. "Mental Causation". The Stanford Encyclopedia of Philosophy. <http://plato.stanford.edu/entries/mental-causation/> (accessed June 4, 2010).

How it is possible for the mind to be causally relevant to events in the physical world has been recognized as a serious philosophical problem at least since Descartes defended his unique form of substance dualism. Nevertheless, it has become ironically clear that the problem of mental causation is sticking around as a difficult problem in contemporary metaphysics of mind despite both Cartesian and non-Cartesian forms of substance dualism finding diminished proponents amongst most philosophical circles. *Physicalism*, the thesis that somehow or other everything is *dependent* on the physical (and not the other way around), is motivated in large part due to the inadequate explanations (or lack thereof) substance dualists offer for how the mind could be causally relevant in the physical world. It is thought that if the mind just were something physical, then the problem of mental causation would simply be dissolved.

Various reasons against reductive versions of physicalism¹ have led many to accept some form of *non-reductive physicalism* – the view that despite everything somehow or other being dependent on the physical, it is not the case that mental properties are *identical* to physical properties. The two most influential forms of non-reductive physicalism have been anomalous monism and functionalism. The importance of the supervenience argument lies in its conclusion that finding a place for the mind amidst the causal workings of the physical world is not possible *simply* by embracing one or the other version of non-reductive physicalism. In other words, the problem of mental causation remains a problem for the non-reductive physicalist.

If reductive physicalism no longer remains an option, then why not accept that the mind simply has no place amidst the causal workings of the physical world? One should admit this position is even more difficult to defend than reductive physicalism. Mental causation is crucial in our self-understanding as free, rational morally responsible agents and epistemically evaluable cognizers. So, if mental causation is not possible, then much of the picture of ourselves isn't possible either. The supervenience argument, then, poses a dilemma for the physicalist: embrace some form of reductionism *or* concede that the scientific conception of the world really does threaten the distinctiveness we take ourselves to have. This dilemma reveals an important point: it would be a mistake to think that the supervenience argument is an argument against mental causation *tout court*. Instead the argument should be understood as calling into question how the mind could be causally relevant in the physical world supposing the truth of non-reductive physicalism.

¹ One of the most influential has been the multiple realization arguments introduced by Hilary Putnam in his 1973 "Psychological Predicates" reprinted as "The Nature of Mental States" in Chalmers, David, ed. *Philosophy of Mind: Classical and Contemporary Readings*. Oxford: Oxford University Press, 2002.

P is a cause of P, with M and M* supervening respectively on P and P*. There is a single underlying causal process in this picture, and this process connects two physical properties, P and P*. The correlations between M and M* and between M and P* are by no means accidental or coincidental; they are lawful and counterfactual-sustaining regularities arising out of M's and M*'s supervenience in the causally linked P and P*. These observed correlations give us an impression of causation; however, that is only an appearance, and there is no more causation here than between two successive shadows cast by a moving car, or two successive symptoms of a developing pathology. This is a simple and elegant picture, metaphysically speaking, but it will prompt howls of protest from those who think that it has given away something very special and precious, namely the causally efficacy of our minds. Thus is born the problem of mental causation.*

Jaegwon Kim, *Physicalism, or Something Near Enough*

Kim's presents his supervenience argument as a *reductio ad absurdum* of the assumption:

(CR) Mental properties are *causally relevant* properties².

More specifically, it is the assumption that some mental property M causes some physical property P*³. The following are the further assumptions he uses along the way to justify his premises:

(SS) The mental *strongly supervenes* on the physical, that is, for any object *o* and any time *t*, if *o* has a mental property M at *t*, then necessarily *o* has a physical property P at *t* and necessarily anything having P at *t* has M at *t*

(NR) Mental properties are *not reducible* to physical properties in a sense of 'reduction' such that mental properties cannot be identified with physical properties

(CE) Except for cases of genuine causal overdetermination, no single property can have more than one sufficient cause at any given time⁴

(CC) If a physical property has a cause at *t*, then amongst its causes at *t* is a physical property⁵

The Supervenience Argument:

² For the sake of clarity I shall speak of properties causing other properties (alternatively we can talk of states causing other states). But, according to Kim, it is more accurate to say that it is the *instantiation* of a property that causes the *instantiation* of another property. This is, of course, skirting over important issues in the metaphysics of causation.

³ Nothing hangs on the fact that the assumption is a mental property *causing a physical property*. Kim's argument can be given (with minimal changes) if we were to begin with the assumption that a mental property causes another mental property.

⁴ For an extended defense of this assumption see Kim, Jaegwon. "Mechanism, Purpose, and Explanatory Exclusion." *Philosophical Perspectives* 3 (1989): 77-108.

⁵ Take note that CC by itself does not rule out mental causation since it allows the possibility of some physical property being causally overdetermined by another physical property and some mental property.

- P1: M causes P* (**CR** = Assumption for *reductio*)
 P2: M has a supervenient base, call it P (**SS**)
 C3: P causes P* (P1, P2)⁶
 C4: M and P cause P* (Conjunction, P1, C3)
 P5: If M and P cause P*, then either (i) M and P are the same property or (ii) P* has more than one sufficient cause (Plausibly true)
 P6: M and P are not the same property (**NR**)
 P7: P* does not have more than one sufficient cause unless P* is a genuine case of overdetermination (**CE**)
 P8: P* is not a genuine case of overdetermination (Stipulation)
 C9: P* does not have more than one sufficient cause (Disjunctive Syllogism, P7, P8)
 C10: M and P are not the same property AND P* does not have more than one sufficient cause (Conjunction P6, C9)
 C11: It is not the case that either (i) M and P are the same property or (ii) P* has more than one sufficient cause (DeMorgan's Rule, C10)
 C12: It is not the case that both M and P cause P* (Modus Tollens, P5, C11)
 C13: M does not cause P* OR P does not cause P* (DeMorgan's Rule, C12)
 P14: P does cause P* (**CC** and given that P* is caused)
 C15: M does not cause P* (Disjunctive Syllogism, C13, P14)
 C16: M does and does not cause P* (Conjunction, P1, C15)
 C17: M does not cause P* (Indirect Proof)

Another way to understand Kim's supervenience argument is that the set of assumptions above is inconsistent, that is, (**CR**), (**SS**), (**NR**), (**CE**), and (**CC**) cannot all be true. In order to resolve the inconsistency, one must abandon one of the above assumptions. Antecedently many philosophers are committed to the truth of (**CR**) and at least some thesis on the dependence of the mind on the physical, e.g. (**SS**). Presumably, no physicalist should find a problem with (**CC**) and (**CE**) has independent support (see note 4). Therefore, Kim urges that the best way of resolving the inconsistency is by rejecting (**NR**), that is, in some sense of 'reduction' we must accept the thesis that mental properties are reducible to physical properties⁷.

⁶ One might question the move from P1 and P2 to C3. In other words, why think that just because P is the supervenient base of M and M causes P* that P deserves to be considered a cause of P*? Kim's answer is two-fold. First, if you take causation to be grounded in nomological sufficiency then P does deserve to be considered a cause of P* since (a) any supervenient base is nomologically sufficient for what supervenes on it, (b) M is nomologically sufficient for P* by being a cause of P*, and (c) the relation of nomological sufficiency is transitive. Second, if you take causation to be grounded in counterfactuals then, again, P deserves to be considered a cause of P* since (d) if the supervenient base had not occurred then what supervenes on it would not have occurred, (e) if M had not occurred then P* would not have occurred in virtue of M causing P*, and (f) these particular counterfactuals are transitive. Either way you choose to ground causation results in P deserving to be considered a cause of P* (see Kim, *Mind in a Physical World*, p. 43)

⁷ For this sense of 'reduction' see chapter 4 of Kim, J. *Physicalism, or Something Near Enough*. Princeton: Princeton University Press, 2005, chapter 4 of Kim, J. *Mind in a Physical World*. Cambridge: MIT Press, 1998, and chapter 2 of Chalmers, D. *The Conscious Mind*. New York: Oxford University Press, 1996.