

Could Mental Causation Be Invisible?

David Robb, Dispositions and Mind Workshop, 5-31-12

I. Emergentism

Emergentism: Mental properties (1) are not physical, (2) depend on physical properties, and (3) exert a novel (non-redundant), downward causal influence on the physical systems from which they emerge.

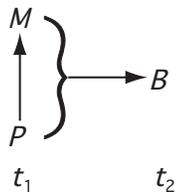
Closure: everything physical that has a cause at time t has a sufficient physical cause at t .

Given Closure (an empirical thesis), mental properties must be either physical, causally redundant, or epiphenomenal. But none of these options is compatible with emergentism.

I'll argue—contrary to some recent claims by Jonathan Lowe—that the case for or against emergentism is, as it appears to be, empirical.

II. Lowe's model of mental causation

B = behavioral effect; P = physical property; M = emergent mental property;
arrow = causal sufficiency



Lowe: because the model respects Closure, M 's efficacy, while non-redundant, is empirically "invisible".

III. Powers

But Lowe's model *does* seem to violate Closure. It respects Closure if "sufficient physical cause" means nomic sufficiency. So causal sufficiency must be something else.

Suppose causation is the manifestation of powers. If y is a manifestation of powers $x_1...x_n$, then $x_1...x_n$ are *complete* in the sense that no other power needs to be partnered with them to produce y . It is in this sense that $x_1...x_n$ are causally sufficient for y .

Closure (reformulated): Every physical manifestation is produced by physical powers.

Lowe's model violates the reformulated Closure: B is not produced by P , since P , although complete for M , is not complete for B .

Shouldn't M 's efficacy thereby be empirically detectable?

IV. Principles of combination

Strategy for revealing M 's efficacy: Study separately, in non-mental contexts, the micro-powers composing P . Use the resulting causal profiles to predict how the micro-powers will partner in the mental context. If B is anomalous, this is evidence for the contribution of a non-physical power.

Such a project requires an empirically confirmed *principle of combination* for powers. Two sample principles:

Additivity: Powers in combination produce the sum of the manifestations they produce independently.

Continuity: Similar powers in combination with similar partners produce proportionally similar manifestations.

V. The micro-latency hypothesis and intelligibility

Even when some confirmed principle of combination is apparently violated in mental contexts, emergence is not the only viable (non-skeptical) hypothesis. In particular, the *micro-latency hypothesis* says it's due to ordinary micro-physical powers combining in novel ways.

Pace O'Connor, this hypothesis does not require powers to be locally responsive to macro-level circumstances.

Can the micro-latency hypothesis potentially explain the apparent violation of *any* principle of combination, thereby vindicating Lowe's invisibility claim? Maybe not: suppose there is a meta-principle of combination confirmed to hold across a variety of first-order principles. For example:

Intelligibility: Powers are manifested intelligibly.

If B is not the intelligible result of P , this is evidence for M 's efficacy, no matter what first-order principle of combination is at work.

Intelligibility doesn't require that we can know the causal profile of any power *a priori*. And a more modest version of the principle, restricted to (say) the neuroscientific level, will do for present purposes.