

First Prize

Why is the causal exclusion argument a problem for anomalous monism?

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1) Introduction

In this essay, I show that the causal exclusion argument (CEA) is an apparent problem for anomalous monism (AM) because it puts pressure on the claim that mental states are causal. I then argue that AM has the resources to respond to this challenge.

In Section 2 I explain the basis of anomalous monism. In Section 3 I show how AM grounds a token identity theory. In Section 4 I introduce the causal exclusion argument and show how it causes problems for AM. Finally in Section 5, I show how AM can respond to worries raised by the CEA.

2) What is anomalous monism?

Anomalous monism is a theory about mental states with propositional content. There are two parts to AM - monism and anomalism. The monism part of AM claims that all events, including mental ones, fall under one class, the class of physical events - a physical event is one where a physical description correctly picks out the event. (Yoo, 2011). AM is therefore monistic about substance but, because there are both physical and mental properties, it is dualistic about properties. (Technically, AM is a form of predicate dualism rather than property dualism, but it is often expressed in terms of property dualism; this is important and I will return to it later). Importantly, AM denies that mental properties can be reduced to physical properties.

AM is usually associated with the American philosopher Donald Davidson (1917-2003). He argues (originally in 'Mental events' (1970)) for AM by proposing three principles, which together make up an 'inconsistent triad'. These three principles (Davidson 1970 p 208) are:

(1) The principle of causal interaction - at least some mental events interact causally with physical events. Example: I decide (mental event) to buy an ice-cream, so walk to the ice-cream van.

(2) The principle of the nomological character of causality - where there is causality, there must be a law: events related as cause and effect fall under strict deterministic laws. Example: when I drop a stone of mass m this always causes the stone to acquire kinetic energy given by $\frac{1}{2}mv^2$

(3) The principle of the anomalism of the mental - there are no strict deterministic laws on the basis of which mental events can be predicted and explained (example: when I fear a visit to the dentist, I am pleased when the appointment is cancelled; but not always: sometimes I have bad toothache and want to attend).

Davidson uses this inconsistent triad to develop a token identity theory (see section 3). But it is worth commenting at this stage on some simple inferences from these three

statements. Firstly, Davidson develops his theory in terms of events. This matters later when he responds to Kim's criticism of anomalous monism. Secondly, Davidson believes that mental events can cause physical events. This is important because it clearly contradicts one early and major criticism of AM, that it leads to epiphenomenalism. Thirdly, mental causation is different from physical causation. Physical causation is nomological; mental causation isn't.

3) From AM to token physicalism

According to (3) above, no mental event m can cause a physical event (or a mental event for that matter) on account of its governance under a psycho-physical law - because such laws are not strict (from (2) above). But from (1), it seems that mental events cause physical events. As all causal relations (from 2) are determined by cause law, the only way this can be achieved is if mental events are identical to physical events. But (says Davidson) mental events cannot be reduced to physical events (as the mental clearly is anomalous). Davidson thus rejects bridge laws linking the mental and the physical as suggested by Kim (1993, p189). This implies that mental events are token identical to physical events - each individual mental event is an individual physical event, just described in a different way.

Here's an example (slightly modified) from the course material (ContEd 2021 p5:3):
When Fred wanted an ice-cream, an event e occurred and this caused him to cross the road to the ice-cream van. Event e had:

- a) The mental property of being (the onset) of Fred's desire for an ice-cream
- b) The physical property of being an activation of (say) a neural state N

Event e caused event e^* which was Fred crossing the road. Importantly, there is only one event - which is described in mental terms as an onset of desire, and in physical terms as an activation of a neural state. Also, importantly, the next time that Fred wants an ice-cream, there could be a slightly different desire, a slightly different activation. This therefore is a token identity theory based on events. This sorts out the trilemma - there is a law-like causal explanation of the road crossing, linking neural state N and the crossing of the road.

So far, so good. But Davidson's argument is open to criticism from the causal exclusion argument. Let's hear about this now.

4) Kim's Causal exclusion argument (CEA)

Here is Kim's argument in logic book form (Kim 1993). Kim argues that mental events do not cause anything.

- 1) There is causal closure of the physical - every physical event that has a sufficient cause (at time t) has a sufficient physical cause at (time t)
- 2) No event has more than one sufficient cause at a time unless causally overdetermined

- 3) A physical event is not causally overdetermined by both the instantiation of a mental property and the instantiation of physical property
- 4) Mental properties are distinct from physical properties
- 5) If a physical event *e* has a sufficient physical cause at time *t* and *e* is not causally overdetermined, then no non-physical property that is instantiated at *t* is causally relevant to the occurrence of *e*
- 6) Mental properties are never causally relevant to the occurrence of a physical event

If Kim is right, then (to go back to the ice-cream example) Fred walking to the ice-cream van is sufficiently caused by a physical event - the neural activity *N*. The mental event (which is token identical to this physical event) seems to do nothing.

5) Davidson's response

Kim highlights two problems with Davidson's account (as is true of all non-reductive accounts). Firstly, as outlined above, the mental seems to be redundant - it doesn't seem to cause anything. Secondly, it seems an extreme coincidence that the mental cause is always around when the physical cause is around. How could this be? Kim's explanation of this is that there are bridge laws between the physical and the mental. The mental just is the physical, described as type identity.

Davidson rejects type identity; firstly, because type-identity is implausible for other reasons, such as multiple realizability and Kripke's rigid designator argument. (ContEd Week 3 2021). Secondly, Davidson claims that Kim (erroneously) sees causation as a relation between properties. Thus, argues Kim, there is a causal law linking 'desire/neural state *N*' and 'crossing the road'. Kim makes this claim (I think) because he believes, in a Humean sort of way, that causation involves correlation. In order to demonstrate correlation, he needs properties to be instantiated many times.

Davidson's response is to deny this story about causation. (Davidson 1993). He says that what Kim is talking about is not causation, but causal explanation. Causal explanation concerns the correlation between properties, which are important because we need to explain and predict events. When we see event properties cropping up in a correlative way, we (wrongly) assume that we are looking at causation. But causation (says Davidson) happens between events - the causal explanation is just a linguistic procedure which explains and predicts causation between events.

With this difference in place, Davidson now has a response to the causal exclusion argument. There is not one, but two sorts of causal explanations. One sort of causal explanation appeals to physical states and involves causal laws. The other sort appeals to mental states and involves folk psychological explanations such as desires, beliefs, and hopes. In terms of Fred and the ice-cream, physical explanation involves a story about a neural state *N* producing Fred's leg movements in the direction of the ice-cream van. The mental explanation involves a story about the fact that Fred desired an

ice-cream, believed that the ice-cream van sold ice-cream, and hoped that the ice-cream vendor would not have run out of supplies.

How does this help with the challenge of the causal exclusion argument? It provides a plausible account of the way that mental and physical causation operate. It provides a job for mental events to do. We now have two ways of explaining the walk to the ice-cream van: firstly, as a nomological relation between neural state N and movement; secondly, as a reason explanation to explain the connection between Fred's desire and belief and his crossing of the road. Both sorts of explanation are important, and both are made true by event causation. Mental properties are no longer redundant.

References

ContEd Philosophy of Mind course material Week 3 - Type Identity theory (2021)

ContEd Philosophy of Mind course material Week 5 - Anomalous monism (2021)

Davidson, D. (1970) 'Mental Events'. In: *Essays on Actions and Events*. New York: Oxford University Press: 207-224.

Davidson, D. (1993). 'Thinking Causes'. In J. Heil, & A. Mele (Eds.), *Mental causation*. Oxford: Clarendon Press.

Kim, J. (1993) The non-reductivists trouble with mental causation. In Heil J and Mele A (eds) *Mental Causation*. Oxford, Clarendon Press.

Yoo J (2011). Anomalous Monism. In *The Oxford Handbook of Philosophy of Mind*, eds Beckerman A and McLaughlin B. Oxford: Oxford University Press
