

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

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Donald Davidson's argument for Anomalous Monism ('AM') is a physical monist argument which is non-reductive of mind because it deliberately makes a place for mental causation in terms of propositional content ('beliefs and desires'). Its physicalist claims are weak, claiming only a token, not a type, identity between mental and physical states. However, because it is a physicalist theory, it seems to run into difficulties with Jaegwon Kim's causal exclusion argument. This argument shows that, if we accept the completeness of physics, then where there is an effective physical cause for an event, a separate mental explanation will be excluded: it will be either overdetermined; or non-causal (epiphenomenal); or non-existent (the eliminativist position). However, I will here set out the argument that causal exclusion only operates when the (physical and mental) properties of events are designated as the causal relata. Since the causal relata of AM are the token events themselves, the causal exclusion argument does not of itself pose a problem for Davidson's theory.

Davidson constructs his AM theory a priori as a resolution of an apparently 'inconsistent triad' of principles/premisses, such that:

1. 'at least some mental events interact causally with physical events' (the Causal Interaction Principle).
2. 'where there is causality, there must be a law: events related as cause and effect fall under strict deterministic laws' (the Nomological Character of Causation Principle).
3. 'there are no strict deterministic laws on the basis of which mental events can be predicted and explained' (the eponymous Anomalism of the Mental Principle).

The principles are apparently inconsistent because, for all combinations, if two of them are true, the third apparently cannot be. AM shows that the inconsistency is misleading, leading us to conclude that we should accept AM as a theory. Resolution occurs because 'all events are physical' (and subject to nomological causation under Principle 2) but (some) have mental, as well as physical, properties/descriptions which apply simultaneously. However, the mental property is not rule-bound (Principle 3) and therefore cannot be included in causal laws under Principle 2. If it is to interact under Principle 1, it must also be physical. So AM claims that a causally-interacting mental event has to be token identical to a physical event.

AM gives an account of **singular event causation** such that, adopting the example in our course:

an event *e* occurs which has the mental property or description of being the onset of a desire for ice-cream *and* the physical property or description of being a specific neural state *N*.

Event *e* causes event *e*\*: crossing the road to get an ice-cream.

We can give a physical causal explanation of this event under Principle 2, identifying Neural state *N* with event *e*\* (in this case a road-crossing).

We can also give a mental reason explanation ('I crossed the road to get an ice-cream.') and, very importantly, claim its causal efficacy.

Davidson's position is dualist, but this is not Cartesian substance dualism since Davidson is a **physical monist** (there is only one substance, which is physical). He is offering a **property or concept dualist** account of the mind-body problem.

Davidson is committed to the causal efficacy of the mental, while attempting to preserve a physicalist account. He must therefore necessarily face the challenge of Kim's causal exclusion argument, which tends to show that you cannot be a non-reductive physicalist. The argument depends on an acceptance of the 'causal closure' or 'completeness of physics' argument, which means that every physical event which has a cause, has a complete physical cause. Non-physical events cannot enter the physical causal chain. As Kim puts it, 'The physical cause therefore threatens to exclude, and preempt, the mental cause. This is the problem of causal exclusion.' The argument runs as follows.

PP1 Pain (a mental event) has a causal role in producing hand-withdrawal ('HW'): it is not epiphenomenal.

PP2 Pain has a physiological basis: C-Fibre Firing ('CFF').

PP3 The completeness of physics is true.

P1 There is a wholly physical causal law relating CFFs with HW.

P2 The cause of *this* token HW was *this* token CFF.

P3 If this pain caused this HW then either:

- a. this pain was this CFF, or
- b. there is over-determination.

P4 Over-determination is excluded: there is only one sufficient cause for every effect.

Conclusion This pain was this CFF.

AM can accommodate this argument on the basis that there is a **token identity** between this particular pain and this particular CFF, which will not be repeated, since each event is a single, unrepeatable event. Davidson is specifically not claiming type-identity, based on the construction of 'bridge laws' between physical and mental states. This theory ran into difficulties with the possibility of multiple realisability; and foundered once Kripke had closed off the escape-route of contingency, by showing that identity claims were rigid designators which had to be established for all possible worlds (Kripke, 1972). By contrast, token identity theory allows for extreme multiple realisability and is true in all possible worlds.

Kim's counter-argument to Davidson is that token identity is not acceptable. There has to be a causal law based on correlation relating the **properties** of CFFs and HWs. Essentially, Kim is arguing that if you want to be a physicalist, you must revert to the bridge laws of identity theory. As a result, you face the following uncomfortable trilemma. You must accept: either type-identity theory; or over-determination; or epiphenomenalism.

Davidson meets Kim's argument by rejecting the trilemma and, instead, attacking the theory of causation on which it is based. Both Kim and Davidson (in his Principle 2) base their arguments on Hume's regularity theory of causation. Hume says that a singular causal statement 'a caused b' is true IFF 'every time there is an A, it is followed by an occurrence of a B'. So causation may be a one-off event, but establishing nomological causation requires correlation and this requires multiple instantiation. So far, Kim and Davidson agree. Where they differ is in their designation of the relata of the causal relation. Kim assumes these are the **properties of events**, because these are capable of multiple instantiation. Davidson says that the causal relata are the **token events** themselves (which have properties), even though they are one-off events.

This aspect of Davidson's theory of causation is counter-intuitive and apparently problematic. Hume would agree with Davidson's view that causation itself is a one-off event, but it is a contradiction by definition for Davidson to appeal to the strict physical laws of Principle 2, since these are based on regularity which requires multiple instantiation of the causal relata.

Davidson answers this problem by establishing a psychological framework of **causal explanation**, which he distinguishes sharply from causation.

Physical causal explanation is achieved through observation of repetition and subsequent correlation in the **properties of token events**. This produces causal physical laws (nomological explanation) by reference to an assumption of the uniformity of nature.

Mental causal explanation (reason explanation) is achieved by reference to mental states, which we theorise and attribute to each other non-scientifically under an assumption of rationality. This is a sort of 'folk psychology' theory (Churchland, 1970).

Davidson's theory of causation allows him to refute the causal exclusion argument because he is able to explain the HW in Kim's example as an event which can be described both physically and mentally (= referred to in terms of its physical and mental event-properties): it can be described physically, as a CFF, in terms of a causal law correlating CFFs with HWs; it can be described mentally, as a pain, in terms of a reason explanation that pain hurts and causes HW.

The causal exclusion argument cannot bite into that double-description (= those dual event-properties), since the description/properties is/are not being put forward as causal. It is the event itself which is causal.

So the issue is whether we are prepared to accept event causation. In my opinion, Davidson gets event causation and token identity sufficiently high off the ground to avoid causal exclusion. In any event, the argument between Kim and Davidson relates to the relata of causation and not to causal exclusion itself.

The peculiarity of the causal exclusion argument is, as Stephen Yablo says, that it is 'badly overdrawn': it can be applied to exclude *any* property as causal. 'Almost whenever a property Q is prima facie relevant to an effect, a causally sufficient determination Q' can be found to expose it as irrelevant after all'. One Yablo thought-experiment posits a pigeon conditioned to peck at red objects. However, redness is causally excluded where a scarlet object is presented, because scarlet is then doing all the work. Yablo argues that one escape-route would be to 'recognize that determinates do not contend with their determinables for causal influence', just as parts and wholes do not compete. We could then regard mental properties as determinables (being red) and physical properties as determinates (being scarlet). This shows that there are alternative ways of challenging the causal exclusion argument, which are not specific to AM.

### Bibliography

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