

## QUESTIONING AN EPIPHENOMENALIST SYLLOGISM

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*Ifocus on a certain epiphenomenalist syllogism summarized by Sarah Patterson. Contemporary epiphenomenalists believe that (A) mental properties are distinct from physical properties, (B) the physical properties of mental events are causally sufficient for the physical effects of those events, (C) given (B), no properties of mental events distinct from their physical properties are causally efficacious in bringing about their physical effects, and (D) the mental properties of mental events are therefore not causally efficacious in bringing about the physical effects of those events. I argue that (C) is at tension with the principle of nomological necessity supposedly binding supervening to subvenient properties, and I argue that (B), upon which (C) is based, is contradicted by the reality of intentionality; a reality that I demonstrate through, among other ways, a thought experiment about a counterfactual involving the possibility of changes in society at the removal of morality and law.*

### INTRODUCTION

Epiphenomenalism is the theory that physical events and states (sense organs, neural impulses, and muscle contractions) have causal effect on mental events and states (thought, cognition, and consciousness) but mental events and states have no causal effect on physical events and states. Epiphenomenalists would argue, for instance, that it is not fear that makes the heart beat faster, but the nervous system. Epiphenomenalism is seen as a form of property dualism because, although it does not attribute causal power to mental events, it at least recognises that they exist, even if as side effects, forms of overflow, exuberance, shadow, echo or side-flares of physical events.

Epiphenomenalism is a combination of a dualism that accepts the conceptual possibility of the existence of mentality in addition to body and a naturalist denial of their causal efficacy.<sup>1</sup> This kind of quasi-dualist physicalism arose since the behaviourist project of denying mentality became increasingly difficult. So the contemporary mood of physicalism is to argue that we have the physical and the mental, but the laws of the physical world are so complete that there is no room for mental causation. Epiphenomenalism thus derives its strength from the difficulty encountered when we try to defend mental causation, since this would require laws that show how mental states cause physical events. Donald Davidson (2003, 208-25) has already demonstrated that true autonomy as free willing human rational

agents implies that mentality is not governable by physical natural laws, so it is either that mental events are not explainable by physical laws to be truly causal mental events, or that they are explainable by physical laws and cannot truly be mental events. We must choose one or the other but not both, since they seem mutually exclusive. Epiphenomenalists are quick to seize on this puzzle to argue that if causation requires laws and mental causation of physical events precisely defies the very idea of laws, then mental causation is implausible. The way that Davidson attempts to solve this puzzle also lends additional strength to epiphenomenalism. He poses three apparently contradictory principles, and reconciling them leans him towards epiphenomenalism. The three principles are: (1) *The Principle of Causal Interaction*: Certain mental events interact causally with physical events; (2) *The Principle of the Nomological Character of Causality*: Cause and effect events fall under strict causal laws; and (3) *The Principle of the Anomalism of the Mental*: There are no strict psychophysical laws capable of predicting mental events. Adopting (1) and (2) will be to reject (3). In fact, adopting any two will be to reject the third. So Davidson (2003, 224) attempted to resolve this puzzle by accepting that (1) mental events can have effect on physical events and (2) causation requires strict laws. The consequence is that he accepts (3) by saying that mental events that have causal powers *must* be physical events. In other words, mental events that have causal powers are those mental events with physical properties, and it is the physical, not the mental, property that accounts for the causation. The result is the employment of the idea of the anomalous nature of mental events to deny pure mentality of causality and the victory (or added point) goes to epiphenomenalism.

Many of the attacks on epiphenomenalism have derived from the fact that it goes against our normal intuition. Hence, Alfred Taylor (1927, 198) describes epiphenomenalism as “thoughtless and incoherent,” while Richard Taylor (1963, 28) describes it as “quite impossible to believe.” Alfred Ewing (1953, 128) argued that the mere motions of our lives disprove epiphenomenalism. It seems to undermine most of science and almost all of common sense (Baker 1993, 90). Alec Hyslop (1998, 63) highlights a complaint to the effect that epiphenomenalism makes us feel that it is not “us” but “our bodies” that are in charge, with the implication that great men in history are mistaken when they thought they were organising events. One problem with these objections is that we need logical refutations of epiphenomenalism. Moreover, we can no longer oppose epiphenomenalism merely on the basis that it is counter-intuitive, since a lot of scientific discoveries in history have countered our deepest intuitions (such as the earth is spherical). It is not also enough to say that we are aware of a lot of mental activities in us that cause physical events, because awareness by itself does not show the nature of the causation. Arguments from evolution have been used both to oppose and to defend epiphenomenalism. Whilst it can be argued that mentality must have causal powers to have evolved through time because only things that are useful evolve, it can also be argued that mentality evolved not because it is useful but because it is a side-effect or echo or shadow of something else that is useful (such as the brain) (see Jackson 1990, 474).

I must, at this point, remark that the denial of mental causality has grave consequences in interpretation. For instance, the disappearance of mental causality is a disappearance of human agency and even human cognition, since they conceptually depend on it. But even this cannot substitute for a logical refutation of epiphenomenalism. To an attempt of such a logical refutation I must now turn.

## QUESTIONING THE EPIPHENOMENALIST SYLLOGISM

Sarah Patterson (2005, 244-45) has presented us with a summary of modern epiphenomenalism, and this summary comes in the form of a syllogism. The syllogism, according to epiphenomenalists, goes as follows:

- (A) mental properties are distinct from physical properties;
- (B) the physical properties of mental events are causally sufficient for the physical effects of those events;
- (C) given (B), no properties of mental events distinct from their physical properties are causally efficacious in bringing about their physical effects; and
- (D) the mental properties of mental events are therefore not causally efficacious in bringing about the physical effects of those events.

As we can see, (A) points to property dualism: mental properties are distinct from physical properties. This argument stems from the fact that behaviourism fails spectacularly to reduce mentality to behaviour or physical events. As such, strict physicalist reductionism has been unfavourable as a physicalist option. Most scholars would prefer to acknowledge that there is a mental life that refuses to be reduced explanatorily to the physical domain. The alternative, therefore, is to acknowledge the existence of mentality. The energy that would have been used to deny mentality of existence is instead used to deny it of causality. What would this causally inefficacious position of mentality in a physicalist world be? For that, we would move on to the second premise of the syllogism, premise (B).

(B) says that the physical properties of mental events are causally sufficient for the physical effects of those events. This is called the argument of Physical Sufficiency. This argument says that physical and mental properties cannot both be the cause of physical events. It argues that this will be called causal over-determination (Kim 1998, 40). If there is causal over-determination, then the causes must be reduced to what is sufficient, not over-sufficient, for the effects. And to assume that the mental properties of mental events can cause physical effects is to violate the principle of the causal closure of the physical domain. What is this principle? It is as follows, "If you pick any physical event and trace out its causal ancestry or posterity, that will never take you outside the physical domain." As such, the physical universe is causally closed: every cause of every event must be determined within the physical domain. If this is so, then we must reject the mental property and choose the physical property as the sufficient cause of the physical effect of the resultant event. The consequence of this set of arguments leads us to premise (C).

(C) says that given (B), no properties of mental events distinct from their physical properties are causally efficacious in bringing about their physical effects. This is the argument of Causal Exclusion. It denies the mental properties of mental events of causal efficacy, which leads to conclusion (D). According to (D), the mental properties of mental events are therefore not causally efficacious in bringing about the physical effects of those events. This is the epiphenomenalist conclusion. Specifically, this conclusion says that mental properties are epiphenomena.

Looking at this syllogism, I accept premise A (dualism), but reject premises B (physical sufficiency), C (causal exclusion), and therefore D (epiphenomenalism). Notice that in order to get at causal exclusion (C) one must arrive at physical sufficiency (B).

So let me start by examining (C) in order to show why it depends on (B). (C) is the Principle of Causal Exclusion, which I will term PCE. Jaegwon Kim (1998, 9) has defended this principle when he tries to demonstrate the contradiction inherent in nonreductive physicalism, particularly the anomalous monism of Donald Davidson. Kim not only criticizes anomalous monism, he also criticizes the doctrine of supervenience, which he reminds us is a minimalist position that is held by most physicalists today. According to supervenience,

Mental properties *supervene* on physical properties, in that necessarily, for any mental property *M*, if anything has *M* at time *t*, there exists a physical base (or subvenient) property *P* such that it has *P* at *t*, and necessarily anything that has *P* at a time has *M* at the time. (Kim 1998, 9)

Due to the decline of reductionist physicalism (such as behaviourism and identity theory), and because most physicalists no longer debate that there exists mentality, the doctrine of supervenience allows physicalists to acknowledge the existence of mentality in a way that allows for some lawlike relationship with the physical domain. The relationship of supervenience is normally understood to be that of dependence, the supervenient is dependent on the subvenient or base. And what does the determining (which is the base) is normally understood to be metaphysically prior to what is determined. But this poses problems for mental causation, since many philosophers also believe in mental causation. If the mental depends on the physical, is it still causally efficacious? Davidson (2003, 224) himself also believes in mental causation, and tries to solve this problem by arguing that although mental events cause physical events, the nature of mental events is exceptional in the sense that there are no laws about how mental events do this (the anomalous character of mental events). Laws can only cover physical events, and since this is not applicable to mental events, it means that the only law-like causality that can be gained from mental causation is from mental events that have physical properties. If we can describe a mental event as a physical event, then it can fall under a causal law with a physical event, but if we can only describe a mental event as a mental event, then it cannot be ascribed any causal law with a physical event. This, for Davidson, reconciles the problem of mental causation with the problem of the nomological character of causal relationships. But Kim (1989, 34) argues that this leads to epiphenomenalism, since the nonphysical aspect of mental events (as Davidson has presented it) has no more work to do. If, according to Kim, (pure) mentality is removed from this world, the causal structure of the world will be left untouched. Kim also argues that anomalous monism goes against supervenience, because, according to him (1989, 6), "...to suppose that altering an event's mental properties would also alter its physical properties and thereby affect its causal relations is to suppose that psycho-physical anomalism, a cardinal tenet of anomalous monism, is false." Also using the doctrine of supervenience, Kim makes his famous argument against mental causation, an argument that I will summarize as much as possible.

Kim's noncausality-of-the-mental supervenience argument is in two stages: the first argues that mental properties can cause other mental properties only if they can cause

physical properties, and the second stage argues that mental properties can cause physical properties only if they are reducible to physical properties. The important thing here is that Kim bases his argument on the Principle of Physical Sufficiency, which is a result of the Principle of the Causal Closure of the Physical Domain. According to him (1998, 37):

To acknowledge mental event  $m$  (occurring at  $t$ ) as a cause of physical event  $p$  but deny that  $p$  has a physical cause at  $t$  would be a clear violation of the causal closure of the physical domain, a relapse into Cartesian interactionist dualism which mixes physical and nonphysical events in a single causal chain. But to acknowledge that  $p$  has also a physical cause,  $p^*$ , at  $t$  is to invite the question: Given that  $p$  has a physical cause  $p^*$ , what causal work is left for  $m$  to contribute? The physical cause therefore threatens to exclude, and pre-empt, the mental cause. This is the problem of causal exclusion.

This is the crux of Kim's (1998, 15, 37, and 41; 2003, 153; and 2005, 13) argument: he asks us to imagine a situation where a mental property  $M$  is said to have caused another mental property  $M^*$  to be instantiated, a case of mental-to-mental causation. By "to be instantiated" he means the instantiation of events, states, or phenomena. The doctrine of supervenience, which, as we have seen, is a minimalist position of physicalism, or "a shared minimum commitment of all positions that are properly called physicalist," demands that  $M^*$  has a physical supervenient base  $P^*$ , and  $P^*$  must be causally sufficient for  $M^*$ . This raises the question: what caused  $M^*$ ? Is it  $M$  or  $P^*$ ? Kim asks us to notice "a tension between vertical determination and horizontal causation. Since  $P^*$  is sufficient for  $M^*$ , it means that  $M^*$  must occur when, and only when,  $P^*$  occurs. That puts the claim that  $M$  caused  $M^*$  in jeopardy. According to Kim (1998, 42-44 and 2005, 40), " $P^*$  alone seems fully responsible for, and capable of accounting for, the occurrence of  $M^*$ , and unless such a base is there on this occasion,  $M^*$  cannot be there either." Kim thus concludes for stage one of his argument, "Given this, the only way anything can have a role in the causation of  $M^*$  would be via its relationship to  $M^*$ 's supervenient base  $P^*$ . . . .  $M$  caused  $M^*$  by causing  $P^*$ ." But stage two of Kim argument says that due to the Causal Closure of the Physical Domain (which gives us the principle of Physical Sufficiency), mental-to-physical causation is impossible. Kim argues that  $M$  itself has a supervenience base  $P$ , and thus we must ask which between  $M$  and  $P$  causes  $P^*$ . Kim remarks that here we are blessed with an abundance of causes of  $P^*$ , and argues that this is "causal over-determination." Since we want to escape causal over-determination, we must, for Kim, choose  $P$  due to the Causal Closure of the Physical Domain. This means that  $M$  (representing mental events) loses the battle of causality, whether it pertains to causing mental or physical events. Epiphenomenalism is the inevitable conclusion of this schema. But let me show some loopholes in it.

My opening criticism of Kim is this: if  $P$  and  $M$  are bound together by nomological necessity, then  $M$  is a necessary component of  $P$ . As such, *the two do not constitute any causal over-determination in causing  $P^*$* . In fact, since  $P^*$  and  $M^*$  are bound together by nomological necessity, they are both together caused by  $P$  and  $M$ , rather than  $P^*$  being caused to cause  $M^*$ . It is difficult to convince me that these are not the outcomes of relations of *necessity*. Nomological necessity is at tension with property individuation or individuating properties, since property individuation presupposes an absence of necessity,

and does not make sense given the relationship of necessity. Causal over-determination should apply only if they are not bound together by nomological necessity. *In that case, we can say that one can happen without the other.* If one can happen without the other, then they belong to two independent causal chains. If they belong to two independent causal chains, then their coming together to claim causality of a single effect is clearly causally over-determining. But this is not what nomological necessity, the central idea of supervenience, is saying. By binding *P* and *M* together with nomological necessity, supervenience is saying that if *P* caused an event, then it is also *M* that caused it. If this is accepted, then Kim's argument of causal exclusion falls apart. Why is this? Because, in my mind, Kim employs the principle of nomological necessity when he rejects mental-to-mental causation (*M* as cause of *M*\*) but discards the same principle when he alleges causal over-determination in *P* and *M* together causing *P*\*. In other words, Kim assumes nomological necessity in order to deploy stage one of his argument but overlooks nomological necessity in order to deploy stage two.

It would seem that I refer to nomological necessity here in a way that runs it up against the dependency of the supervenient on its subvenient or base, or against the metaphysical priority of the physical base. But I do not think so: nomological necessity holds that where there is something mental there is also something physical, therefore the elimination of the mental must mean the elimination of the physical. Let me offer an example. If "red" supervenes on "colour" with nomological necessity, then there is no over-determination between the effects of an object being red and the object being coloured. For one cannot exist or instantiate without the other: red cannot exist without colour, and colour cannot exist without a specification such as red, green, and so on. The fact that the specification of the colour (red, green, etc.) supervenes on colour does not mean that colour alone can have an effect: we cannot say that a person saw "colour." There is no over-determination of causes involving colour and red. Nomological necessity, as such, has implications that make supervenient properties just as indispensable as subvenient properties. Nomological necessity, therefore, is at tension with the theory of over-determination.

Perhaps, Kim had gotten his inspiration from Ned Block (1990, 166), who had remarked in an earlier paper, "...if we prefer the nomological approach to causal relevance (of mental properties), I am doubtful that there is any way of avoiding epiphenomenalism." But it is clear from the above analysis that this is not correct.

One might argue, at this stage, that indispensability does not mean causality: the indispensability of shadows, for instance, do not mean their causal efficacy. But here is my take: although we would not make direct inferences from indispensability of mental or supervenient properties to their causality, the thesis of indispensability seems as close to the thesis of causality as it is to the thesis of noncausality, that is, if it is not in fact closer to the thesis of causality.

Elsewhere, Kim offers an account of macrocausation that, he says, respects the causal closure of the physical domain. He (1984, 262) argues that macrocausation can be reduced to microcausation. Take *F* and *G* as macro properties, and *x* and *y* have macroproperties, *F* and *G*, respectively. The macrocausal relation of *x* and *y* would be the same as saying that it is the micro properties of *F* and *G* that are in the causal relationship. This, according to Kim, is because it is the same individual that has macro property *F* who has micro property *m*(*F*). In other words, Kim argues here that microcausation is macrocausation. *But mental properties*

*are macro properties*, by the very terms of supervenience. So why grant causation to macro properties through the benefit of nomological necessity in this instance and deny mental causation by over-looking nomological necessity in another?

We thus notice that Kim's argument for causal exclusion (C) depends on the Principle of Physical Sufficiency (B). I must now seek to examine the Principle of Physical Sufficiency, which I will term PPS. As I have said, this principle is derived from the Principle of the Causal Closure of the Physical Domain, which I will term CCPD. Without this principle, there would be no need to assume that physical events have only physical causes. Without the assumption that physical events must require physical causes, there would be no need to find that mental events are causally otiose. This foundational principle can be stated as follows:

CCPD: Every instantiation of a physical property that has a cause at time  $t$  must have a complete physical cause at same time  $t$ .

Kim (1998, 40) defines this principle (which I call CCPD) as follows:

If you pick any physical event and trace out its causal ancestry or posterity, that will never take you outside the physical domain. That is, no causal chain will ever cross the boundary between the physical and the nonphysical. For you would be saying that any complete explanatory theory of the physical domain must invoke nonphysical causal agents.

However, in the very next sentence, Kim offers us glimpses of what we can use as our platform for arguing against CCPD. According to him (1998, 40), "Never mind a complete physical explanation of everything there is; there couldn't even be a complete physical explanation of everything physical. It is safe to assume that no serious physicalist could accept such a prospect." CCPD might be a working assumption because it is psychologically healthy for enthusiastic research in the natural and physical sciences, but it seems to me that it is better applied in science on a case by case basis, a sequel of which is that we must exercise some caution in making CCPD coextensive with all forms as well as objects of inquiry. This is because the following question is not out of order: "What if something beyond the (physical) universe exerts pressure upon the universe, something which probably supervenes upon the entire universe, a colossally macrostuff, for instance?" One might notice that this is similar to the question: "What if mental events exert causal influence on physical events?"

CCPD ultimately denies that there can be intentional causes of physical events, since intentions are mental. What it says is that social events are caused, not by human intentionality, but by physical or microphysical chain-reactions that began from the very beginnings of time (if time has a beginning). When, however, we seek to apply this principle to many social events, we seem to face a blank wall. This near-infinite-chain-of-physical-causes theory of human intentionality as the cause of human behaviour does not jell in many cases. For example, at the instance of this principle, the statement "Michael's robbing a bank caused him to be arrested by police" will be wrong, since it implies causal relations between Michael robbing a bank and his being arrested, and the problem would be that the

causal relations are not entirely physical causal relations. CCPD would argue that both Michael's robbing a bank and his being arrested by the police have a causal ancestry that dates back a very long time. Keep in mind that the notion of intentionality can rule out the notion of an infinite chain of causes, since intentionality can veto, stop, or change any chain at any moment.

Also, the statement "Peter's scandalous behaviour caused the department to convene an emergency meeting" will be false, since it would imply that it is Peter's behaviour (which is physical) that caused a decision to hold an emergency meeting (which is mental) and which caused the holding of the meeting (which is physical). Yet a third example: the statement "I entered a burning house because I thought that my colleague was trapped and needed to be rescued" would be false. The idea is that when I stepped into a burning house, risking severe burns, it was because I *thought* that my colleague was trapped in the fire and needed rescue. In order to examine if there is a causal connection between what I thought and what I did, we may ask this question: if I did not think that someone needed to be rescued, and other things being equal (including my being sane), *what on earth would lead me to enter a huge ball of burning fire?* Proponents of CCPD would have to explain what microbiological mechanisms in my body, in the absence of the thought that someone was burning in the fire and other things being equal, would trigger me into it. In any case for CCPD, in these cases, the causes of events have been traced beyond the physical domain, and the truth-value of the statements must, therefore, be denied. But since we intuitively know that there are causal connections between these respective events, they mean that CCPD may be insufficient in accounting for these human phenomena.

Let me give another example with a thought experiment envisaging the absence of morality and law in the human world. Let us ask ourselves? Could we think of abolishing all moral and legal codes of whatever kind? What kind of societies would we see? I am sure that even physicalists could opine that there would be some slight change of general behaviour, especially in terms of impunity. Most people would unhesitatingly argue that there would be anarchy and chaos. A great number would agree with Hobbes's reference to nasty, brutish, and short lives. But the very possibility of even a slight change in general behavioural trends in the wake of the removal of all moral and legal codes demonstrates that culpability and, therefore, intentionality is real. If this is given, CCPD must be false. Epiphenomenalism ultimately argues that humans are not culpable for their actions, since all actions have purely physical causes. In other words, it would be wrong to convict people of crimes, or reward people for achievements or exemplary behaviour. But the very fact that moral codes and legal statutes can regulate people means that they can gain traction with human intentions.

The Libet experiments do not disprove intentionality either. Libet and his colleagues (Libet et al. 1983, 623 and Libet 1985, 529) have shown that although action may be preceded by consciousness of a decision to act, consciousness of a decision to act is preceded by neurological activity. Although Libet himself has argued that the time span between consciousness of decision to act and action presents opportunity for a conscious veto, some scholars (see Banks and Pocket 2007, 658 and Pocket 2002, 144) have seen the experiment as a demonstration of the illusory nature of intentionality. But the experiment may have recorded only the awareness of decision-making rather than decision making itself, and since awareness of action is posterior to action, it is plausible that the early neurological activities constitute the actual decisions.



So we must either reject CCPD or relegate it to the natural and purely physical sciences, where it does the work of psychologically bolstering scientists in their quests to explain more and more of physical phenomena.<sup>2</sup> In either case it would not comprehensively account for existence *per se*. It would, for instance, be unable to account for the operative modalities of the social or special sciences, for the very foundation of morality and law (which is human intentionality), for cultural norms and conventions, and least for the nature of mentality and their causal efficacy.

If CCPD collapses, then PPS collapses, since PPS depends on CCPD. If PPS collapses, then PCE collapses, since PCE depends on PPS. What these mean is that if the Principle of Causal Closure of the Physical Domain collapses, then the Principle of Physical Sufficiency collapses with it, and so will Kim's argument for Causal Exclusion. If all these collapse, then the epiphenomenalist syllogism remains a valid, yet unsound, syllogism. As such, epiphenomenalism would remain as much a mystery as the mystery that inspired its consideration as a solution to the mind-body problem – interactionism.

## CONCLUSION

In spite of a long history of epiphenomenalism, I restricted myself to interrogating an epiphenomenalist syllogism offered by Sarah Patterson on behalf of epiphenomenalists. One could see that the argument rests on causal exclusion, which rests on physical sufficiency, which in turn rests on the principle of the causal closure of the physical domain. Examining Kim's argument for causal exclusion, I demonstrated that his charge of causal overdetermination is at tension with the principle of nomological necessity underlying the very minimalist supervenience he frequently employs. Nomological necessity entails indispensability of connected parties, including mentality, and although indispensability of mentality does not translate to their causal efficacy, indispensability neither implies noncausality. But elsewhere, nomological necessity has helped Kim grant causality to macro properties, when in fact mental properties can be seen as macro properties. I employed a number of scenarios to demonstrate the workings of intentionality (suggesting mental causality), and argued that culpability and, therefore, morality and law deny the assumption of the causal closure of the physical. My conclusion is that epiphenomenalists need to clarify these issues in order to bolster epiphenomenalism.

## NOTES

1. An objection has been raised that epiphenomenalism does not necessarily entail property or any dualism, and reference has been made to Davidson's anomalous monism. But this misreads Davidson, whose discussion of mental events presupposes that they are at least conceptually distinct from physical states. More generally, the statement that mental events are at least conceptually different from physical states is metaphysically necessary for the secondary statement that mental events are epiphenomenal: there would be no need to say that something is epiphenomenal if one does not acknowledge in the first place that such a thing exists.

2. It is one thing to agree that scientists need a belief system such as CCPD to be productive (of course, it would be funny for scientists to work so hard whilst simultaneously

nursing the belief that there is no physical causal closure), but it is another thing to think that every belief is real and, therefore, CCPD is correct.

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