Excluding Exclusion: The Natural(istic) Dualist Approach

Abstract.

The exclusion problem for mental causation is one of the most discussed mind-body puzzles. A solution to it is usually put forth either as an argument for one mind-body view or another, or as a way to compatibilize such a view with the most acceptable assumptions behind the problem. There have been two main approaches to this problem. The first is put forth as an argument for reductive physicalism, and implicitly against nonreductive physicalism and a fortiori against mind-body dualism. The second approach is less combative, and is concerned with saving nonreductive physicalism from the potential danger of either mental-physical overdetermination, or mental epiphenomenalism. However, there has been a general agreement among philosophers, especially because most of them are committed to some form of physicalism, that the exclusion problem cannot be escaped by the dualist. I argue that a proper understanding of dualism --its form, commitments, and intuitions—makes the exclusion problem irrelevant from the dualist perspective. The paper proposes a dualist approach and solution to the exclusion problem, based on a theory of event causation, according to which events are neither fine-grained (Jaegwon Kim), nor coarse-grained (Donald Davidson), but medium-grained, namely, parsed into mental and physical property components. A theory of contrastive mental causation is built upon this theory of events, for which the problem of exclusion does not arise.

The exclusion problem for mental causation is one of the most discussed mind-body puzzles. A solution to it is usually put forth either as an argument for one mind-body view or another, or as a way to compatibilize such a view with the most acceptable assumptions behind the problem.

The problem has received a great deal of discussion and is by now very familiar. Consider a physical event putatively caused by a mental event. According to the assumption that the physical realm is causally closed, all physical events have sufficient physical causes. Now if the mental event that putatively caused the physical event is
distinct from the physical effect’s sufficient physical cause, then it looks like either it
overdetermines the effect, or does not cause it after all.

There have been two main approaches to this problem. The first is put forth as an
argument for reductive physicalism, and implicitly against nonreductive physicalism and
a fortiori against mind-body dualism. The most fervent proponent of this approach over
the years has been Jaegwon Kim. The second approach is less combative, and is
concerned with saving nonreductive physicalism from the potential danger of either
mental-physical overdetermination, or mental epiphenomenalism. Lately, a substantial
part of the literature on the problem has focused on this approach\(^1\).

However, there has been a general agreement among philosophers, especially
because most of them are committed to some form of physicalism, that the exclusion
problem cannot be escaped by the dualist. Although there have been some attempts from
the dualist point of view to respond to the challenge, they have been characterized by
merely denying the premise of causal closure of the physical or accepting the conclusion
that mental states are epiphenomenal, or, finally, accepting an implausibly widespread
phenomenon of overdetermination. In other words, while, for instance, the reductive
physicalist can happily propound, as a response to the exclusion problem, that we should
deny the premise that the mental and the physical are distinct, since that is precisely her
document, the dualist is in a worse position if she denies closure or accepts
epiphenomenalism: there is nothing in the dualist doctrine to cry for such commitments
as far as the mental-physical relation is concerned.

It is worth then trying to develop a more coherent and systematic dualist approach
to the exclusion problem. Although my sympathy lies with dualism, my purpose here is
not to argue for dualism, but to argue for its aptness in escaping the exclusion problem, if correctly understood. I will argue in what follows that a proper understanding of dualism --its form, commitments, and intuitions—makes the exclusion problem irrelevant from the dualist perspective. All we need to do is: (1) specify what kind of dualism is the one worth taking seriously nowadays, (2) formulate the account of causal relata and causal statements which is most suitable from the dualist point of view (and I hope independently as well), and (3) analyze the consequences for the exclusion problem with the help of the tools obtained by (1) and (2). The numbered tasks will correspond in what follows to the sections of the paper.

1. Dualism

When asking whether the dualist has anything to say as far as the exclusion problem is concerned we should first get clear about what kind of dualist are we addressing. The more plausible kind of dualism is very close in a certain respect to physicalism: it wants to keep a clear commitment to naturalism. While many physicalists tend to equate naturalism with physicalism, most of the contemporary defenders of dualism believe that dualism can take a naturalistic form. The basic idea is that the physical and the mental realms are ontologically distinct, yet they are tightly connected in actuality by the obtaining of irreducible psychophysical laws. The mental-physical relation is not metaphysically necessary, but still it is nomic, according to the naturalistic dualist².
A second important point is that naturalistic dualism takes the form of property dualism. As opposed to the classical Cartesian substance dualism, property dualism does not presuppose a mental realm as an autonomous substance, capable of existing without any material support and totally disconnected from it. According to property dualism the actual world is populated by essentially material bodies, but they happen to have irreducible mental properties, whose instantiation, as we mentioned, is nomologically connected to the instantiation of correlated physical properties.

Next, we should make clear what our dualism is and what it is not committed to. The commitment to psychophysical laws is not a commitment to these laws being causal. The mental-physical property relation is one thing, causation is quite another. The psychophysical laws that property dualism is most concerned with are not causal. They are laws that are responsible for patterns of mental-physical correlation, which translate to a form of nomological supervenience of the mental on the physical. As far as causation is concerned, more theory is needed than what naturalistic property dualism per se offers. That will be the topic of the next section.

A second commitment is mental properties’ distinctness from and irreducibility to physical properties. As opposed to physicalism, property dualism holds that at least some mental properties are as fundamental as physical ones, that is, they are not reducible to the latter. Again, this commitment should not be taken as saying anything about the causal powers of fundamental mental properties. Fundamentalness does not entail either causal efficacy or lack of such efficacy. Something more is needed in order to establish something in this respect.
Finally, there are some implicit intuitions that a dualist has, as far as the events in the actual world are concerned. Two such intuitions are important in our context: I will call them the material embodiment of the mental and the mental enrichment of the physical. The former states that actual mental property instantiations are always grounded in physical substrata, rather than free-floating or occurring anomalically. This derives from the fact that the property dualist is a substance monist, according to which objects are essentially physical. The latter intuition states in effect that some events with physical properties are enriched by also instantiating mental properties. This enrichment is translated in the dualist talk in statements like “some movements are actions rather than mere movements”, or “some verbal behavior is meaningful discourse rather than mere emission of sounds”, or “some brain states are desires rather than mere brain states”. This intuition is taken seriously by dualists and, as we shall see, it will play a crucial role in our analysis of the exclusion problem.

2. Causation

This section is dedicated to what the most natural way to understand causal relata and statements should be, from the naturalistic property dualist point of view. The causal model I will reach at the end is inspired by recent work on causation, combining certain elements from L. A. Paul’s aspect causation (2000), Jonathan Schaffer’s contrastive causation (forthcoming) and Terence Horgan’s mental quausation (1989).

We should first deal with the issue of how to understand the causal relata, the cause and the effect. Traditionally, causal relata are taken to be events, which can be understood in various ways. The two main contenders have been Davidson-events, which
are coarse-grained, spatiotemporally individuated primitive concrete particulars, and Kim-events, which are fine-grained, property exemplifications by objects at times, individuated by \( \langle \text{object, constitutive property, time} \rangle \) triples\(^4\).

For a standard context of disagreement between the two approaches, consider adverbial modifiers of event names. Let us say that Selma’s hitting the window caused the window’s shattering. However, suppose Selma’s hit had to be, and actually was, powerful, in order to have such an effect. So it is also true that Selma’s powerfully hitting the window caused the shattering. According to the Davidsonian approach there is only one cause event, with at least two true descriptions of it, since the hitting and the powerful hitting take place in the same spacetime region. However, according to Kim’s approach the modifier “creates” a new distinct event. The first event is constituted by the triple \( \langle \text{Selma, hitting the window, } t \rangle \), while the second by the triple \( \langle \text{Selma, hitting the window powerfully, } t \rangle \). For Kim, then, every new property that could be exemplified at the given spacetime region creates a corresponding distinct event\(^5\).

I want to propose a third way to understand events, which, I think, is closer to how a naturalistic property dualist will think about causal relata. It is an approach according to which events are medium grained, and I will call them “parse events”. The basic idea inspired by the Davidsonian coarse-grained conception and going against the Kimian one is that one and the same event can be an exemplifying of more than one constitutive property. But in Davidson’s view properties have no role in the analysis of causation: it is only a multiplicity of predicates and descriptions that may be at once true of events, which are taken as primitive particulars. Parse events, on the other hand, are precisely characterized by a triple having as elements an object, a set of properties, and a
time. As we can see, then, parse events are neither Davidsonian, nor Kimian. The proposed view avoids overmultiplication of events characteristic to Kimian views, a parsimony that represents a partial independent reason to go for parse events, and ensures at the same time a role to properties in causation.

My main motivation for the parsed theory of events is an observation to the effect that when it comes to two or more properties exemplified by a particular at the same time it is not the case either that we *always* have prima facie Davidsonian or Kimian intuitions. For instance, in the case of two event descriptions like “Brutus’ killing Caesar” and “Brutus’ stabbing Caesar”, standing for events that took place at the same spatiotemporal region, most of us would prima facie think that they refer to a single event, while in that of descriptions like “The ball’s spinning” and “The ball’s warming”, standing, again, for spatiotemporally coinciding events, most would say that they refer to two events. In other words, the parsed theory is meant to conform to an observed heterogeneity of our intuitions with respect to event individuation, while both the Davidsonian and the Kimian approach are all-or-nothing views on events, that is, they give a universal characterization for all events.

If the idea of parse events were not also backed by some criterion for individuating events, but stated merely to *make it possible* for a metaphysic of events to accommodate both more or less Davidsonian and more or less Kimian intuitions regarding specific cases, according to the context, it would be regarded as certainly less ambitious than the classical approaches. However, the heterogeneity of intuitions in particular cases plays an important role in sorting out what ontological factors are at play when deciding about various cases.
The criterion of individuation for spatiotemporally coinciding events I propose proceeds in two steps. First we check whether the descriptions picking out the events pick out properties that belong to the same quality space (cf. Lawrence Lombard 1986). If they do, then the descriptions refer to a single event. If not, we move to the second step, namely, check whether the properties belonging to distinct quality spaces are tightly related, by a relation that is at least nomic. If they are so related, we have a single parse event, with the properties in question as its components. If not, we have two distinct events. Consider the classic examples of Brutus’ stabbing/killing Caesar and that of the ball’s spinning/warming. In the former case, since stabbing is, in this particular case, a way of killing, the two properties belong to the same quality space, so our intuition that there is a single event is vindicated. Similarly, in the case of adverbial modifiers: hitting and hitting powerfully belong to the same quality space, so the event descriptions containing these phrases refer to a single event. In the latter case, that of the ball’s spinning/warming, we have two properties that belong to distinct quality spaces. Further, there is not even a nomic connection between spinning and warming, so, again, our intuition that we are speaking about two distinct events is vindicated. For a classic example, of a parse event, consider a functional dependence of some physical magnitude on some other(s), based on a nomic connection, e.g. The Law of Ideal Gases, according to which pressure = temperature/volume. If the two descriptions are “The gas’ reducing its volume” and “The gas’ increasing its pressure”, in the context of a constant temperature, then according to the criterion proposed here they refer to a single parse event, having volume reduction and pressure increase as its components.
Let us proceed to some more examples. According to the parsed theory of events there can be events that are multiple property exemplifications. This is consistent with the existence of events that are exemplifications of only one property. The verdict in each case is given by our intuitions regarding individuation and identity. As opposed to this, the Davidsonian and the Kimian approach will not take into account such intuitions of heterogeneity. Take again classic example of a ball that both rotating and warming. This is a problematic case for the Davidsonian approach since our intuition is that the warming and the rotating are two distinct events, while according to that approach, since they are spatiotemporally coinciding, they are one and the same event. According the parsed theory, in this case there is no single event that is a parsing along the two aspects, the warming and the rotating. Now take another example, meant to reveal the advantage of the parsed theory over the Kimian approach. The following sentence is a truth in the actual world:

(a) Dr. Tim’s administering ABVD chemotherapy causes the patient’s suffering neurological toxicity.

The sentence says that the administration of ABVD (Adriamycin, Bleomycin, Vinblastine, and Dacarbazine) chemotherapeutic combination will cause damage to the nerves. But the substance that is responsible for such damage is Vinblastine. Yet the sentence makes perfect sense and is actually true. In other words, we have an intuition here that there is a unique event “Dr. Tim’s administering ABVD” defined by a multiplicity of constitutive properties. On the Kimian view of events, however, there is
no place for such event, understood as defined by more than one constitutive properties, but there are at least four events: “Dr. Tim’s administering A, while administering B and V and D”, “Dr. Tim’s administering B, while administering A and V etc.”, in accordance with the multiplicity of properties exemplified by the ABVD chemotherapy regimen. There are even more events according to the Kimian account, like: “Dr. Tim’s administering A while administering B”, “Dr. Tim’s administering B while administering V”, and so on. The parsed theory can conform to our intuition here by saying that the ABVD chemotherapy is a parse event, composed of four constitutive properties, and can offer the following paraphrase for (1):

(b) Dr. Tim’s administering ABVD chemotherapy, qua Vinblastine-based, causes the patient’s suffering neurological toxicity.

What happens here is that (2) refers to the parse event of ABVD chemotherapy while emphasizing an aspect, a property that is its constituent part when it comes to causal relevance. I will turn back to causal relevance after I talk a bit about the importance of properties in causation.

The problem of a place for properties in causation is a stringent one, especially for the property dualist in the context of mental causation. She would like to have a view on just how mental properties act upon the world. On the other hand, what distinguishes the property dualist from traditional Cartesian interactionism is that according to the former if there is causal action of the mental in the world, it is not done by an autonomous distinct substance, but rather by the mental aspect of an essentially material substance. In
other words, we have two constraints on events: that they are essentially material particulars and that they have mental aspects.

Paul (2000) proposes a view she calls aspect causation, according to which it is property instances, so called “aspects”, which are most plausibly taken as causal relata, especially in the context of mental causation. I follow her in the respect of awarding a more important causal status for properties than in coarse-grained theories. The difference is that according to the present theory of parse events it is events as particulars that are causal relata (something it has in common with coarse-grained approaches), but these events can be parsed into component aspects. Finally, there is a structured causal division of labor within parse events along these aspects. Let us explain how this division of causal labor is supposed to work.

As Horgan (1989) points out, when $a$ causes $b$, it does not do it simpliciter, but by virtue of possessing some property. So it is always the case that $a$ qua $F$ causes $b$ qua $G$. For instance, it is qua wet that the rain causes the oxidation of my tools qua being made of oxidable metal. In the mind-body context examples are even more at hand: it is qua intention that a brain state causes the rise of a hand qua salutation. This quaternary relation Horgan calls “quausation”. This kind of semantics for causal statements containing names for events, which in turn are constituted by aspects or properties, is also one of the fittest ways to express the idea of the subsumption of events under laws. If one accepts, as I do, that in the mind-body case the property duality is present and characterizes both cause events and effect events, then one should also accept that there are mental as well as physical laws.
The property dualist will be especially congenial to Paul and Horgan’s insistence on the role of properties in causation, because she would want to say that it is mental properties that are responsible for the instantiation of many other properties in the world. However, as we saw, physical properties also have a special importance in the property dualist doctrine, as they are the nomological correlates of the mental properties. The mental/physical duality advocated by the property dualist creates an appropriate context for contrastivity. This is the last element of the view I propose.

The contrastive approach to causation (Bas Van Fraassen 1980, Christopher Read Hitchcock 1996, and Jonathan Schaffer forthcoming) questions the assumption that the causal relation is binary, having the form ‘\( c \) causes \( e \)’. Schaffer, for instance, proposes a quaternary relation of the form ‘\( c \) rather than \( C^* \) causes \( e \) rather than \( E^* \), where \( C^* \) and \( E^* \) are nonempty sets of contrast events, and where the context determines in each case the relevant contrast sets, and so the contrast pairs \( \{ c, c^* \} \) and \( \{ e, e^* \} \), \( c^* \in C^* \) and \( e^* \in E^* \).

The mind/body duality just seems perfect for such contrastivity. The view of mental causation I propose can be called “contrastive quaussion”. According to it, causation in the actual world takes place among parse events and there is a contrastive causal division of labor within parse events along their aspects, so that the general form of causal statements involving mental causes and effects is:

**Contrastive Quausation**: event \( C \) qua \( M \) rather than qua \( P \) causes event \( E \) qua \( M^* \) rather than qua \( P^* \),
where $M$ and $M^*$ are mental properties and $P$ and $P^*$ are physical properties. For an example, consider the context of mental causation related to someone’s saluting by raising his hand. It can be formulated like this:

(C1) $C$ qua intention to salute rather than qua mere neural activity causes $E$ qua salutation rather than qua mere movement of the hand.

Or consider phenomenal mental properties, and the case of someone speaking about the beauty of red roses. It will be formulated as:

(C2) $C$ qua phenomenal red rather than qua neural state causes $E$ qua meaningful talk about redness rather than qua mere emission of sounds.

Before moving on we should clarify a bit the contrastive approach proposed here, in comparison with standard contrastivism. First, it should be emphasized that the contrastive quausation model, like e.g. Schaffer’s contrastivism, is not an analysis of causation as such, just a way to understand causal statements. On the other hand, the standard contrastive account of Schaffer’s is put forth as a way to emphasize the cause of a certain effects while eliminating another possible cause event, which is causally irrelevant. So the contrast events are eliminated in the standard approach, they do not act as causes and in fact they are absent in the world, though present in the semantic form of causal statements. In our case the idea is not to eliminate the contrast properties, because they are certainly instantiated and are constituents of the parse events we are working
with. For example, in the mind/body case the idea is precisely that both mental and neural
properties are instantiated by a subject who acts as a result of a mental/neural event, so
we have no reason to eliminate either of them. The idea is therefore to emphasize an
aspect without eliminating the other. What my proposed semantic form ensures is a
clarification of which aspect of the cause is responsible for which aspect of the effect. At
the same time we can affirm that event c causes event e simpliciter. But we won’t say that
c qua M causes e simpliciter, or that c causes e qua M*, etc. We have two ways to
formulate causal relations: one is by appeal to the parse events simpliciter, the other to
state the causal structure at play by appeal to the components within such events.\(^7\)

Now that we arrived at a definite shape for psychophysical causal statements as
understood, I hope most naturally, by a naturalistic property dualist, let us finally
consider its relevance for the exclusion problem.

3. Exclusion

In order to see the relevance of the above analysis for the exclusion problem, we must
first formulate the problem in a clearer way. The problem basically consists in the
incompatibility of the following five propositions.

(1) Some mental events/properties are sufficient causes of physical effects.

(2) All physical effects have sufficient physical causes.

(3) No effect can have more than one sufficient cause unless it is overdetermined.

(4) Mental events/properties do not overdetermine their physical effects.

(5) Mental events/properties are distinct from physical events/properties.
The incompatibility relations are as follows. The truth of (1)- (4) implies the falsity of (5), i.e. reductive physicalism. The truth of (1)-(3) and (5) implies the falsity of (4), i.e. widespread overdetermination. The truth of (2)-(5) implies the falsity of (1), i.e. epiphenomenalism of the mental with respect to physical effects. The truth of (1), (2), (4), and (5) implies the falsity of (3), i.e. so-called causal compatibilism. Finally, the truth of (1) and (3)-(5) implies the falsity of (2), i.e. the incompleteness of the physical. The problem is thought to be that all of (1)-(5) have independent plausibility, so that none of the options above seems very good, especially for the dualist.

The solution provided by the account proposed here consists in accommodating the truth of all the five propositions, depending on the interpretation of proposition (1). The general picture of causal relata offered by the account of parse events sanctions the view that events are consitutively defines by a triple \( \langle x, S, t \rangle \), where \( x \) is an object, \( S \) is a set of properties that \( x \) exemplifies, and \( t \) is the time of exemplification. As we explained, unlike Kim, we consider that one and the same event can be a multiple property exemplifying. In the mind/body context, both the cause event and the effect event are parsed along the mental/physical property duality, so that \( S \) consists of a mental property \( M \) and a physical property \( P \). The cause can be considered then as the triple \( \langle x, \{M, P\}, t \rangle \), while the effect as the triple \( \langle y, \{M^*, P^*\}, t^* \rangle \), with \( t < t^* \). We will call the cause ‘c’ and the effect ‘e’. Given this account, motivated by intuitions of the property dualist, like the intuition of the mental enrichment of the physical, there does not appear any a priori reason to either exclude mental properties from the causal network of the world, thus rendering them inefficacious, or to accept overdetermination. The contrastive quausation
approach will sanction the following two propositions, which do not imply any causal conflict or competition between the mental and the physical:

(C3) $c$ qua $M$ rather than qua $P$ causes $e$ qua $M^*$ rather than qua $P^*$.
(C4) $c$ qua $P$ rather than qua $M$ causes $e$ qua $P^*$ rather than qua $M^*$.

Let us start with the danger of overdetermination, as that is quite straightforwardly avoided by the contrastive quausation approach. Overdetermination would be true if the following counterfactuals were true:

(A) If $c$ had occurred qua $M$, but not qua also $P$, $e$ would still have occurred.
(B) If $c$ had occurred qua $P$, but not qua also $M$, $e$ would still have occurred.

Both of these counterfactuals are false. Let us consider the more important and discussed of them, the one stating that had the physical cause occurred without the mental one, the effect would still have occurred, that is (B). It is false on our property dualist picture, because the physical cause stripped from its mental property cannot but cause an effect that is similarly not mentally enriched. This, of course, applies only to contexts standardly under scrutiny in the mental causation debate, namely when some mental event with physical underpinning cause behavior. It is, therefore, perfectly compatible with purely physical causes, (those are not under scrutiny in the mental causation debate) like a hit in the head, bringing about mental effects, like pain. Further, it is also compatible with mentally enriched causes bringing about purely physical effects, for example, my
conscious moving of my arm causing the cup’s being there rather than here. In any case, when dealing with the standard context of some physical/mental parse event causing behavior, the behavioral effect’s being mentally enriched is a function of the cause’s being mentally enriched, not as a matter of definition, but rather as a contingent actual empirical fact.

Turning back to our counterfactual, the purely physical event’s effect is an event \( e^* \) distinct from \( e \), since the latter is constituted by \( \langle y, \{M^*, P^*\}, t^* \rangle \), while the former by \( \langle y, P^*, t^* \rangle \). So the counterfactual is false.

Here one may object that (A) and (B) are not the correct counterfactuals to consider. It is rather the following ones that we should prove to be false:

(C) If \( c \) had occurred qua \( M \), but not qua also \( P \), \( e \) qua \( M^* \), but not qua also \( P^* \) would still have occurred.

(D) If \( c \) had occurred qua \( P \), but not qua also \( M \), \( e \) qua \( P^* \), but not qua also \( M^* \) would still have occurred.

These counterfactuals are probably true, but they are irrelevant from the dualist perspective. Their consequent—the occurrence of a purely physical, not mentally enriched effect—creates a context in which the issue of mental causes does not even arise. From the dualist point of view, the only physical events that can also be considered actions, meaningful discourse, etc. are those for which we may wonder whether and in what way mental causes contributed to their bringing about. The consequent of (C) and (D) precludes precisely the possibility of a discussion in this respect to even start.
Another worry one could have is: what is the dualist argument for the view that \( c \) qua \( P \) causing \( e \) qua \( P^* \) would not entail the existence of \( e \) qua \( M^* \)? If the existence of \( e \) qua \( M^* \) is entailed by the causing of \( e \) qua \( P^* \), then, the argument goes, the specter of overdetermination threatens again: we don’t need to have \( e \) qua \( M^* \) caused separately, since it already exists if \( e \) qua \( P^* \) does.

In reply, whilst I don’t reject the idea that \( c \) qua \( P \) causing \( e \) qua \( P^* \) by itself is enough to entail the existence of \( e \) qua \( M^* \), given actual facts and laws, I reject that this is sufficient for overdetermination. Better than asking whether, given what happened actually, \( c \) qua \( P \) causing \( e \) qua \( P^* \) entails \( e \) (qua both \( P^* \) and \( M^* \)), we should ask whether the actual contribution of \( c \) qua \( M \) in the situation was redundant or whether properties \( M \) and \( P \) collaborated in bringing about \( e \) (cf. Carolina Sartorio MS). According to the theory proposed here, the world is dualistically constituted, so that in mental causation contexts events are parsed along the mental/physical aspect divide. This means that insofar as an effect event has such a dual structure by way of so being constituted, it has it because of the actual contribution and collaboration of the aspects of a similarly dual parse cause event. So it is not true in this case that the contribution of the mental aspect of the cause was redundant for the dual effect event to occur.

Therefore, the danger of overdetermination is avoided by contrastive quausation. But let us move to the danger of causal inefficacy or epiphenomenalism. This is a bit trickier.

According to the contrastive quausation account there is a causal division of labor within parse events, so that certain aspects rather than other of the cause are causally responsible for the occurrence of certain aspects rather than others of the effect. In the
mental causation context we set up the two propositions that express this fact – (C3) and C(4). However, an objector may immediately complain that contrastive quausation is precisely a way not to solve the exclusion problem since it renders proposition (1) false. Namely, it seems to entail that mental causes, by their very nature and role in the causal division of labor within parse events, don’t have physical effects. Therefore, contrastive quausation is a form of epiphenomenalism.

My reply is that according to our framework it is a matter of brute fact that causation in the actual world takes place among parse events, and not between aspects of these events. So mental causation is to be understood within this framework. Mental causation does not take place between aspects. This means that if we interpret proposition (1) as saying that:

(1*) Events with mental aspects sometimes cause events with physical aspects,

then our framework is perfectly fit for its truth, and, therefore, all of (1)-(5) can be accommodated. Of course, also according to our framework, the following interpretation of (1) is clearly unacceptable, on grounds independent from the exclusion problem:

(1*) Events qua mental rather than qua physical cause events qua physical rather than qua mental.

So, from the dualist perspective, (1*) is not an acceptable premise to be used in formulating the exclusion problem or a solution to it.
If the objector insists saying that we should give a ‘yes’ or ‘no’ answer to the question “Is the physical event that is my arm’s moving caused by the mental property or by the physical property?”, I cannot but refuse entering the debate set up on such a presuppositional framework. The question, from the perspective we set up here, is on a par with “Have you stopped beating your wife?”, with unacceptable presuppositions, and, therefore, no possibility of a ‘yes’ or ‘no’ answer. As I have insisted, according to contrastive quausation there are two ways of interpreting proposition (1) – as referring to parse events, or as referring to aspects of those events. The former interpretation yields the truth of (1), while the latter its falsity. But the former, and not the latter, is the independently acceptable way of thinking about mental causation according to dualist intuitions.

A further objection is the following. In the contrastive causal sentences it is plausible to think that the causation at work in the case of mental and physical components, respectively, is different. Namely, in the physical case we have a so-called ‘oomphy’ notion of causation, characterized by transfer of ‘causal juice’, most plausibly energy, while in the mental case we have causation as dependence. If this is the case, then contrastivity comes out as trivial.

In reply, I want to point out that my account is supposed to be compatible with both the contrastive formulation of causal sentences and with the formulation ‘c causes e’. This means that I am not using different notions of causation, but a general notion, based, as it is plausible to assume, on laws of nature and counterfactual dependence. In the account proposed causation takes place among events rather than among properties,
this is why we need a notion of causation neutral between the oomphly view of physical causation and the dependence view of mental causation\textsuperscript{13}.

As for the danger of having to accept the falsity of the causal closure of the physical realm, it is quite straightforwardly avoided by our proposal: causation between parse events in the mind/body context takes place along independent, mental versus physical, aspects of those events, so that there is no interference with the empirical thesis of causal closure. Furthermore, we can even reformulate the thesis within our framework:

(Causal Closure*) For any event \(e\) having a physical aspect \(P^*\), there is an event \(c\), having a physical aspect \(P\), such that \(P\) is sufficient for \(e\)’s having \(P^*\).

Therefore, contrastive quausation can accommodate (1)-(5).

Finally, a few words about causal laws in the putative cases of psychophysical causation. The naturalistic property dualist believes in psychophysical correlation laws. These state regularities of synchronic covariation between the mental and the physical realm. At the same time, the physical realm is characterized by causal laws. These state regularities of diachronic covariation between among physical property instantiations, relating them as cause and effect. Now the question, which I have mentioned in the first section of the paper, is whether the mental-physical diachronic relation is causal or not. The answer is that if we take a regularity view of causation (recall that the contrastive quausation model is not an analysis of causation as such, just a way to understand causal statements), then we can assert that the mental-physical diachronic relation is causal, since we can derive a causal law, a regularity, from the existence of mental-physical
synchronic correlation laws and the physical-physical diachronic covariation laws. So, for example, from (a) the law that an intention I always co-occurs with neural property N, and (b) the law that the instantiation of neural property N is always followed by a movement of the arm M, we can derive the indirect causal law that I is always followed by M. If that is sufficient for causation (which is prima facie doubtful, as long as we hold that causation does not involve overdetermination), then we have one more reason to believe in mental causation in the present framework. However, that is a big ‘if’, which is beyond the scope of this paper\textsuperscript{14}.

\textsuperscript{1} For one of the most recent proposals and citations of previous attempts in this direction see Karen Bennett 2003.

\textsuperscript{2} Naturalistic forms of dualism have been proposed and defended by, e.g. David Chalmers (1996) and Tim Crane (2001).

\textsuperscript{3} It is surprising then that one of the most well known arguments for property dualism, Frank Jackson’s knowledge argument (1982) is presented by Jackson not only as having an anti-physicalist conclusion, but also as an argument for the epiphenomenalism of mental properties.


\textsuperscript{5} We should be careful here and specify that I am speaking here of \textit{numerical distinctness}, these further Kimian events not being distinct in any other way from the original. According to an anonymous referee, Kim’s distinction between constitutive and characterizing events makes my objection to his account invalid, because in this specific case we can say that there is only one event, “Selma’s hitting the window”, which has \textit{hitting the window} as a constitutive (defining) property and \textit{powerfully hitting the window} as the characterizing property. But this is not so. According to Kim ([1976] 1993), even though events can exemplify multiple properties, it is the constitutive triples that somehow define them. But this does not imply -indeed Kim ([1976] 1993: 45-6) says the contrary- that characterizing properties of an event don’t ‘create’ further events: characterizing properties of an event E are themselves constitutive properties of events that saptiomentarily coincide with E and which are so described. In our case, ‘Selma hitting the window’ has \textit{hitting the window} as constitutive and \textit{powerfully hitting the window} as characterizing, while ‘Selma hitting the window powerfully’ has \textit{hitting the window powerfully} as constitutive. See also Paul 2000: 237-9. Thanks to L. A. Paul for
clarifications via correspondence on this issue and to the anonymous referee for calling my attention to the issue of constitutive/characterizing properties

6 The idea behind the parsed theory is closest to the cases Jonathan Bennett (1988) calls "nonzonal event fusions". Nonzonal fusions are cases when two events occupy the same space-time zone, that is, they occur in the same place at the same time. Here we include the famous examples of warming-rotating and stabbing-killing.

7 Here is another advantage over the Kimian approach. In Kim’s view cases that we take as the occurrence of parse events are cases when a multiplicity of events cause another multiplicity of events. This is sometimes counterintuitive because Kim does not and cannot specify a structure in this kind multiple causation. To take my example of ABVD chemotherapy, according to the Kimian view we should say that <the administration of A> and <the administration of B> and <…> causes <nausea>, <hair loss>, <temporary sterility>, <nerve damage>, <lung damage>, <…>, where each pair of parentheses contain distinct but spatiotemporally coincident events. This structureless way of stating the causal relation at work is counterintuitive since it could be taken as implying, for example, that the administration of A causes nerve damage, which is not true. The parsed theory is supposed to help here by the idea of a causal division of labor internal to events themselves.

8 The reductive physicalist seems to be in the best position since her doctrine is precisely to deny proposition 5. This is why Kim or David Papineau (2002, chapter 1) in fact use the exclusion problem as an argument for physicalism.

9 Here again one should notice that C3 and C4 would come contradictory under the standard way to understand contrastivism, but not under the way I formulated and explained it. Recall that standard contrastivism is eliminative with respect to contrast events, while our approach here is just one of emphasizing one aspect of the cause as relevant for another aspect of the effect, while other aspects of them are still instantiated by the structured events simpliciter. Relatedly, one could object: if both c qua M rather than qua P and c qua P rather than qua M cause e (however e is caused), why isn’t there overdetermination? In reply, I should reiterate that according to the parsed theory there are two ways of expressing causal relations: either we say that c simpliciter causes e simpliciter, or we say that c qua F rather than qua G causes e qua F* rather than qua G*. So the formulation of the causal relations as it appears in the objection is not an admissible one.

10 Thanks to an anonymous referee and to Barry Loewer for pressing this point.
11 Thanks to an anonymous referee for asking me to be more precise about this dependence of the behavior on its cause as far as mental enrichment is concerned.
12 The solution to the exclusion problem proposed here might remind one of another, classic solution to it, namely, the neo-Wittgensteinian explanandum doubling solution (e.g. Georg Henrik Von Wright 1971), according to which on the side of behavior there are two things to be explained: the motion as such and why it is an action. Then, it is argued, the latter is explained by the cause having a mental component, so that there is
not explanatory competition between mental and physical properties on the cause side. However, the resemblance is only superficial since my proposed solution involves some theorizing about the ontology of events and causation, while neo-Wittgensteinians used to be concerned only with the theory of explaining human action.

13 The distinction between these two notions of causation has been, of course, put to work sometimes precisely for the purpose of solving the exclusion problem, for instance by Paul Pietroski (2000).

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