Mental Causation: Davidson, Kvart and Logical Bling-blings'

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This paper is an online version of a portion of an, extant, larger manuscript. It is in places, highly, polemical. It addresses the issue of "mental causation" as presented by Donald Davidson. Considerable attention is given to a paper by Igal Kvart. Kvart is a superb philosopher whose work deserves wide attention. I take exception to his employment of certain ideas associated with the failure of transitivity of counterfactual conditionals, and how to surmount the difficulties this presents for mental causation. I take the position that while a number of suggestions by Kvart are useful, they cannot be decisive because the issue is an empirical one, and the philosophical assumptions leading up to it are constricted by the limitations of current discussions of the relation of mind and body. My position is dualistic in the sense that I am convinced that physical science cannot, alone, provide a suitable account of agency, cognition, and personal identity. Physicalism remains a promise; the position is, either, bad philosophy or not philosophy at all. The online reader, if he is interested should return from time to time, as this remains a work in progress. More will be forthcoming on the relation of epiphenomenalism and supervenience.

The Fear of Dualism and Logical "Bling-blings."

Dualism is considered by some a "dire conclusion." Such sentiments are, typically, unaccompanied by any statement of what dualism is. It matters little within the context of current philosophy of mind, for philosophy of mind is, by and large, a studied effort to maintain a respectable course between physicalism and doctrines such as emergent materialism and epiphenomenalism. As a consequence, philosophy of mind for the most part has shrunk to a single point: the mind-body problem. The history of the subject is, to a large degree, regarded as superstition; this notwithstanding the fact that many of the most prominent neurologists have rejected physicalism.

Suppose we were to ask the generic physicalist the following question: what terrifies you so about the mental? Philosophy, easily, engages possible worlds, intensions, universals, and sets, etc. but it has a difficult time with pains and beliefs, when they go beyond grunts, groans, or, as in the case of beliefs, propositions we act upon. True, the situation is a bit more complex, but not by very much when weighed against the complexities of traditional philosophy of mind in the works of C. D. Broad or Wm. James, just to take two examples. There is disinterested neglect of the differences between Cartesian dualism and "mentalism" based on intentionality, but a great deal of excitement over whether to go with supervenience or epiphenomenalism or, down right eliminativism. So what is, so,

terrifying about accepting mentalism, given its history and intuitive appeal? The answer is if I am right is that it reflects both a failure of nerve and a disposition to be satisfied by what I will call "logical bling-blings." What, then, is a logical "bling-bling"? For my purposes a "logical bling-bling" is a good idea in logic used to adorn some solution to a philosophical problem; as a neck can be made more attractive by hanging around it a gold chain. I will provide a familiar example: the theory of descriptions. Russell's 1905 theory of descriptions was not used as a "bling-bling"; but when the theory was adapted to express a new formulation of Occam's razor it was: wherever possible substitute logical constructions for inferred entities. Here the theory of descriptions, a logical idea of profound significance to philosophy of language and philosophy of mathematics, receives application as an adornment; "hanging" it around Occam's neck, so to speak, gave Occam added to its philosophical significance. But it did nothing to advance the actual content of Occam, since in this formulation it does not tell us *when* such a substitution is possible. Something similar obtains in philosophy of mind.

Referential opacity tells us nothing about the mind, but as a fact about mental reports it, frequently, adorns a linguistic approach to philosophical problems related to mind. It adds value to this approach while solving very few if any, real, problems related to questions of mind. Although minds may not exist we can, merrily, go about earning our way by looking at language. The model theoretic treatment of modality is another "bling-bling," when it adorns a treatment of counterfactuals and, thereby, a theory of causation. It, then, provides added value at the level, at least, of appearance. Such is not the case with the theory of rigid designation which directly and immediately addresses profound philosophical questions of substance. However, the Theory of Types (Russell) is, sometimes a "bling-bling," we arrive at variables of a higher type. We are philosophers. What do we do? We go hunting for entities that type variables might refer to. The theory, then, becomes a logical "bling-bling." My claim is that the logic of counterfactuals has become a "bling-bling." Indeed, in this paper, I adopt its use, as such, but with the intention of showing that being a "bling-bling" merely adorns; they do not solve philosophical problems.

A Feature of Orthodox Physicalism

One feature of most physicalistic hypotheses is that they introduce a theory of events that rules against most any theory of the mental causation. Among the philosophical "heavies" that sport such theories are Jaegwon Kim and David Lewis. Both regard events as properties of regions in some sense. They differ in some of the details, but essentially both maintain a view of events where the logical subjects of events are regions in space. There is no distinction to be drawn between events and processes or events that do and those that do not range over regions of space. Significantly, they appear to assume that the space in question is physical space. Why? Because they are physicalist to begin with! Once this constraint is placed on events, the die is caste: there can be mental events only if those mental events occur in physical space. Arriving at physicalism, from this direction, is either by way of faith, consensus, or simple prejudice; for, clearly, there are concepts of space which are not of the sort they take as fundamental, concepts we find discussed in Russell, Poincare, C. D. Broad and many other difficult to read and time

consuming philosophers of a bygone era. Russell, during his neutral monist days, proposed something far more flexible, viz. that regions are to be defined in terms of events, not, as Kim and Lewis would have it, the other way around.

Historical Introduction

As I said, the philosophy of mind has been dominated by the mind-body problem. The issue of "mental causation" is a renaming of the problem of volition, although those who begin philosophy with Wittgenstein may not realize it. The expression has become associated with the views of Donald Davidson, although it is discussed by philosophers as diverse as Descartes and Elizabeth Anscombe. Mental causation encompasses not only the possible causal relations that may obtain between mental events and processes but between mental events, say, and physical behavior, taking the form of basic actions and what follows from them.

The theory of human action in philosophy goes back at least as far as Aristotle, but in Aristotle attention to the subject is not as a topic within the philosophy of mind but, rather, ethics. Action is important insofar as it is good or bad and, so, the discussion centers on practical reasoning and the execution of intentions following deliberation. Later things change, particularly, owing to Descartes and Spinoza. The issue of action is no longer, exclusively, the domain of ethics but takes a turn towards understanding the philosophical underpinnings of a theory of action where no ethical implications are evident or present. The idea of "conation" enters especially in Spinoza and Leibniz and the theory of human action is viewed within the context of larger more global interests. This view dissipated with the collapse of teleology in science, owing mainly to theories in biology advanced by Darwin. But before this the dismissal of action was encouraged by Kant, who brought the subject back to ethics. Taking some of his cues from ideas in Kant, although never directly acknowledged, Wm. James reintroduced the theory of action outside of ethics, making it the locus of some of his most penetrating insights into philosophical issues in psychology.

James' work let to considerable discussion among philosophers of the early part of the twentieth century. Essays by F. H. Bradley, G. F. Stout, Alexander Shand and many others took James to task without rejecting the main tenets of his introspectively based approach. This was soon forgotten and would continue to be forgotten, as evidenced, e.g., by the neglect of the theory of "volition" by those who dealt with Bradley's theory and all that came out of it, even in works devoted to Bradley. Russell's views on causation and the emergence of behaviorism and the influence of "learning theory" in particular, beginning, perhaps with Thorndike and Pavlov buried the discussion of volition, let alone conation. The neglect was, further, encouraged by the students of Wittgenstein, not so much Wittgenstein, himself. Most especially the contempt for Jamesian notions of action was felt among Wittgensteinians with a strong religious background; mainly those who detested Descartes work while embracing Aritstotle. What was basic to the Jamesian view, and what was accepted, even, by his more formidable critics, such as Bradley, was the notion that central to human, free, action was an "idea." Ideas were required for free

action, and while the body and neurology entered the picture, ideas were central – notwithstanding uncertainties as to their nature. This was true, particularly, in James' case since he was not a dualist, instead, standing by his theory (shared with Mach) of what would be called "neutral monism." Although Russell, for a time, affirmed neutral monism he would argue that beliefs and desires provide the causal basis of human action (The Analysis of Mind). He would be followed by Ducasse and, only, later by Davidson. By the time of Davidson, philosophy had been transformed by the "linguistic turn" and many of the ongoing disputes pitted behaviorism against dead end materialism ("eliminative materialism"). The demise of behaviorism, after the fashion of Watson and Skinner, let to a new look at the prospects for mind in philosophical psychology. Davidson's "anomalous monism" reinvigorated a subject whose history had been largely forgotten by, nearly, all parties concerned. Davidson's views were informed by those of Elizabeth Anscombe who, while seemingly familiar with the tradition, disparaged the theoretical tenets of the Jamesian view, relegating ideas, somewhat, to private entities subject to Wittgenstein's private language argument, an argument which according to many anti-Cartesians, such as Kenny, was decisive. Kenny, surreptitiously, extended this argument to volitions and acts of will.

This move by Kenny was indicative of things to come. One of the only bright spots, depending on one's philosophical orientation came from Melden who rejected Humean accounts of "free action." Although a number of Melden's arguments were debunked, his insights were penetrating and he set the tone for discussions to follow, including Davidson's. By this time, dualism had become a shadow of its former self, owing in part to neglect by those, even, who may have been inclined in this direction. Subsequently, in many instances the portrayal of dualism was framed in the context of straw-man arguments, and today there are any number of laughable attempts at criticizing dualism based on little else than negative impressions, certainly not on the history of the position criticized. This is done, frequently, by some of the best philosophers in the area of philosophy of mind. Here Jaegwon Kim's discussion of "immaterial minds" (Physicalism, or Something Near Enough) stands out as exemplary of this trend. Physicalism, today, reflects a failure to comprehend the complexity of the problems associated with the philosophy of action. James never mentions causation in connection with his theory of volition, but it plays a role in how attention to an idea of action leads to action. I will have little to say on this, inasmuch as, elsewhere, I discuss it in great detail. What is important is to see how the discussion of causation, initiated by Russell, led to relating the Jamesian conception of the efficacy of ideas and the Russellian notion of nomic relations codified in the statement of natural law.

The idea of logical atomism understood in, very, broad terms within the theory of action gave the discussion direction. Hume said that causation was a relation between beliefs, one that had events as the subject matter. One billiard ball striking another causes another to strike another causing it to go into the side pocket, say. Here we have event-event causation. Capturing event-event causation symbolically took the form of variables ranging over events in the statement of natural law. True, Einstein's General Theory led many philosophers, such as Russell, to take events as basic, over "aspects" or properties, but part of the animus for this acceptance was logical atomism itself, where each event

can be characterized sententially as a sort of "atom." But this, even as history, is not without controversy and, so, I turn to the consequence that on the view taken here acceptance of event-event causation had on the discussion of "mental causation."

Event-event causation, taken as fundamental, rules out taking events as definable in terms of processes, as long as we adhere to contemporary physicalist orthodoxy. Processes, if alluded to at all, appear, simply enough, to be drawn-out events. This has been thematic in much philosophy even before logical positivism; in the wake of positivism and its aftermath the oversimplification lingers. But for now let's introduce the principle issue of mental causation as we find it in Davidson and, then, take a look at specific attempts to address it. I will bring into the picture from time to time a paper by Igal Kvart, yet unpublished ("Can Counterfactuals Save Mental Causation"). Like Davidson and others addressing this topic there is little, if any, in-depth understanding of the nuances of dualism. This is not to discredit Kyart. His discussion of counterfactuals in connection with this issue would have been unrecognizable to James and those early philosophers of psychology who lacked a mania for denying the mental. Before proceeding I will add this one remark on this writer's view of what is "mental," For, present, purposes I will simply take to be mental anything than falls outside the "nomological net." My own position is closer to Brentano's than Descartes, a distinction that escapes, entirely, those who see everything in the context of the mind-body problem - which in large measure has become philosophy of mind with no mind. Such a position is bound to invite criticism, but consider this: after examining much of the physicalist literature, what is it that is meant by 'physical'? If it means whatever is said to exist in physics this is much like saying that what is mental is what is said to exist by psychologists. So what is physical for a physicalist is difficult for the physicalist to explain without presupposition or controversy. Rarely, is it discussed. Furthermore, the notion of a "cause" is seldom discussed. In the anti-mentalist literature it is, hardly ever discussed. To be sure, there are interminable discussion, or so it seems, about the causes and laws, causes and preemption, overdetermination, and supervenience, but "cause" is, typically, assumed to be whatever Hume meant when he argued that in the world independent of beliefs causes don't exist, a peculiar reliance on the part of physicalists who deny the efficacy of belief beyond the "physical" or what is "caused" by the physical. It is, largely, the "folk respectability" of the power of science that infuses deference to any philosophical enterprise which professes to be "physicalist." How can we expect the physicalists to get the relation between Cartesianism and mentalism (based on intentionality) right, if they provide little else than hand waving when asked to explain 'physical'? Retreating into talk of 'predicates' helps very little.

What makes 'to think' a mental verb? If reduction obtains then there is no "mental" verb, unless we next begin to classify illusions or return to the myths of so called "folk psychology" (phenomenology for dummies). Many physicalists fail to distinguish events and processes; physicalists who discuss volition in great depth without telling us what it is; philosophers who engage mental causation without engaging causation and, yet, we are expected to entertain "reductionism" without understanding what is being reduced to what. The perspicuity of physicalism vs. the obscurity of mentalism is a rumor more than an established fact.

Before turning to Davidson, one conjecture may be worth making: inasmuch as, according to Davidson, "attitudes" such as belief and desire enter into mental causation there is a distant relation, but real, relation to James. James had nothing to say about causation, but his insistence on the centrality of ideas is not so far removed from the role Davidson has in mind for beliefs and desires. There is a complex issue regarding the status of "content" but this would take us far a field in part because our concept of "content" follows Twardowski and not those who view it as something like a "sentential property" of mental states. On the view taken, here, philosophy's preoccupation with propositional attitudes has taught next to nothing about the mind.

Davidson's Argument for Mental Causation

For purposes of our discussion the most important passage from Davidson is where he says:

The refutation would consist, not in showing AM + P inconsistent, but in showing it inconsistent with supervenience, and so with the supposition that the mental properties of an event make a difference to its causal relations. For supervenience as I have defined it does, as we have seen, imply that if two events differ in their psychological properties, they differ in their physical properties, and the physical properties matter to causal relations. (Davidson "Thinking Causes" in *Mental Causation* edited by John Heil and Alfred Mele, Oxford 1993. p. 14.)

Before proceeding, a word on what he means by "supervenience." I will not employ the one he takes some pains to discuss in "Thinking Causes." Instead, I will cite one which in this essay he takes to be equivalent.

...a predicate p is supervenient on a set of predicates S if for every pair of objects such that p is true of one and not of the other there is a predicate in S that is true of one and not the other. (op. cit. p. 4)

This raises a number of questions about what kind of predicates are at issue. 'Intentionality' in the sense prescribed by mentalists, particularly, those who follow Brentano's lead, is a relation. If a predicate, then, is intentional it is a relational predicate.

It is important to keep in mind that supervenience, qua relation, as understood by Davidson is noncommittal as to the nature of the relation. While distance between objects makes a difference to the gravitational and, therefore, causal properties of the objects, this differs from the chemical properties "making a difference" to their causal relations. If the chemical properties of the objects were different they would, in a sense, be different objects, whereas a difference in distance does not constitute a difference in the objects. What goes without comment by Davidson, or others, is that the properties which are said to supervene are not relational properties. If a relational property, in the sense of being a property which is "contracted from a many place predicate" (Reichenbach _Modern Philosophy of Science _ Routledge & Kegan Paul 1959. p. 162) cannot be a property upon

which another property supervenes, then if intentional properties involve "contents" that extend to what is "external" to the agent, intentional content cannot supervene on properties of brain states, alone. If 'being angry at Bob' is a predicate of Bill but not John, then while being angry at Bob may "make a difference" that difference cannot be expressed in terms of predicates referring to non-relational properties of brain states. In other words, unless the relation of intentionality is, itself, a supervenient relation, supervenience cannot account for intentional mental states. Davidson has a watered down idea of intentionality, based on relativity to descriptions, but the linguistic turn in this regard will not resolve the ontological issue. I will set this aside without resolving the issue because to pursue it leads us towards an extended discussion of mental contents. We continue on the assumption that the predicates Davidson is talking about are nonrelational mental predicates and not relational mental predicates.

Davidson is a master at making difficult things look easy. Like Quine, who had an unquestioned mastery of technical details, Davidson anticipates technical bumps in the road and goes around them by negotiating his case in terms of common-sense nontechnical language. With this in mind a close formulation of the argument will necessitate greater precision than is manifest in the above quoted remarks. When he is not stating his own position, Ernest Sosa has a gift for lucidity of exposition. Let's take, as the basis for our understanding, his formulation of Davidson's argument.

(a') Mental properties of events supervene on their physical properties: i.e. no mental difference without a physical difference (assumption).

(b') Mental properties of events make a difference to their physical properties: i.e. events that are mentally different must be physically different (from a').

(c') Physical properties of events make a difference to their causal relations: i.e. events that are physically different must be differently causally related to some event (assumption).

(d') Mental properties of events make a difference to their causal relations: i.e. events that are mentally different must be differently causally related to some event (from b', c'). (Ernest Sosa, "Davidson's Thinking Causes" in *Mental Causation* edited by John Heil and Alfred Mele, Oxford 1993. p. 44.

As we explore the ins and outs of this argument, we will concentrate on counterfactual conditionals, such as "If the agent had been in some other mental state, he would have been in a different brain state." The counterfactual will express the operant sense of "making a difference." The reader is advised to keep in mind that this discussion is undertaken in the context of a much larger, nearly completed, project addressing volition and the nature of the Will. Since my own views on counterfactuals and mental causation are influenced more by Igal Kvart than other philosophers, such as David Lewis, I will draw from Kvart's discussion, although there will be areas of, probable, disagreement.

Kvart's Criticism of Davidson's Argument

One, seeming, obstacle to framing mental causation in terms of counterfactuals is that the counterfactual treatment of causation, as David Lewis pointed out, is faced with a problem of preemption. A counterfactual purportedly expressing a causal connection may fail if the effect of that causal relation is "preempted" by other events, events which "overdetermine" this outcome. Like Kvart, I will set this aside but add one consideration to the discussion that may prove relevant down the road. Kvart remarks on preemption that "such complications are not that prevalent in the causal relations between the brain state of the agent and her resulting behavior." (Available on-line, "Can Counterfactuals Save Mental Causation" p. 3).

Not only, then, does it make sense to speak of preemption in relations between brain states and behavior, there is this possibility. Now I think Kvart is correct in dismissing this as an important concern, particularly, since it is related to problems of causation more generally, but if we consider actions of persons and not, merely, events in the brain there is a curious asymmetry. On the one hand, even though we dismiss the possibility, the possibility exists and, certainly, makes sense to introduce in very special circumstances. But consider this: does it make sense to say that a mental action on the part of an agent preempts another mental action? Ruling this out as a possibility may argue against the possibility of causation relating two mental events, where subvening physical events are not at issue. Conversely, does the impossibility of such preemption imply that mental relations do not supervene on events which may be causally related in the domain of physical events? But if mental events _are_ physical events what precludes a mental event preempting another mental event? If the causal properties of mental events and brain events differ, this would appear to rule out, radical, reductionism. For the time being we will, following Kvart, interpret "makes a difference" counterfactually. The supervenience of a mental event, M, upon its subvenient base, P, will be expressed as:

~M > ~P

Similarly, we express the proposition "If the brain event, P, had not occurred, then the behavior, B, would not have taken place," as:

~P > ~B

Accordingly, we express Davidson argument (again following Kvart (op. cit. p. 5) as:

(A)

1. $\sim M > \sim P$ 2. $\sim P > \sim B$ ------3. $\sim M > \sim B$

Argument form, (A), consists in two premises; one premise, (1), codifies the, purported, supervenience relation between M and P: M supervening on P. The other premise, (2),

counterfactually, expresses a causal relation between P and B: behavior as the causal consequence of a bodily, i.e. neurological state, P. But now let's look at another argument form, retaining the interpretation of the propositional constants.

(B)

 $1. \sim M > \sim P$ 2. \cap B > \cap M ----3. \cap B > \cap P

This argument is much like, but not isomorphic to, (A) in the sense that we have two counterfactual expressions of, purported, dependency or supervenience. It is not required that (2) express supervenience, however. Supposing that both (1) and (2) express supervenience, then behavior supervenes on some mental event or state, and that mental state, by (1), supervenes on some physical event or state. This introduces questions such as "Can supervenience be a transitive relation without assuming the very transitivity that is rejected when the transitivity of counterfactuals is rejected? Our counterfactual characterization of supervenience suggest not. Do we introduce something like Kvart's special conditions in order to yield transitivity, if this sort of transitivity is needed for a consistent alternative to epiphenomenalism? I see no way of extending his conditions to supervenience, even if it works for counterfactuals. Indeed, whether transitivity is required in order to "save" mental causation, beyond Davidson's views on the subject, has not been argued for (or against). This issue needs resolution, although, we cannot pursue the matter, here. But, before, proceeding, a word on the supervenience, or lack of it, of premise (2) of B.

If we take it that (2) asserts that behavior supervenes on some mental state, we are faced with the "inconvenience" that philosophy of mind is a bit more complex than the mindbody problem. The problem is that a distinction must be drawn between volition and intentional behavior. Again, there is no simple logical "bling-bling" that is going to resolve the issue, so I will state the issue, briefly. Wm. James made possible a distinction few, if any, in action theory have made use of: the distinction between a willful action and an act of will. I explore this in great detail, elsewhere. The importance of this distinction is this: not all free-actions are intentional. Such actions, at the level of basic actions, are what have been called "volitions."

Metaphorically, such mental actions have no "text" of their own. Acts of will, even when they are restricted to basic actions do have a text. Suppose I am looking for a passage in Aristotle's Nichomachian Ethics. I quickly thumb through all the pages, scanning them as I do for the underlinings. In this case, a "thumbing" is an example of willful action. It is not an act of will because each "thumbing," while voluntary and volitional is not part of the "text" of an intentional action. What has the text is the "act of will" which it contributes to realizing; that is, the conscious objective of finding that passage by means of this process. Similarly, suppose I decide to put on a tie. I throw it around my neck and begin to tie. The motion associated with the basic actions involve is behavior that is free,

and volitional; but it is not an act of will; pushing the tie inside the folds, for example, is a willful act – not, like tying the tie, an act of will. Clearly, this is not beyond controversy. But no logical "bling-bling" will resolve the matter; still, it is a fundamental distinction we encounter when we attempt to answer the question whether premise (2) of (B) expresses a supervenience relation. This is important inasmuch much as many philosophers see little, or nothing, beyond what has been required in discussing the mindbody problem. In one sense the premise suggests supervenience of acts of will on the mental; in another, there is the suggestion of supervenience of willful acts on the mental; and in, yet, another sense it suggests no supervenience relation at all. Pursuing this would involve delving into topics I address in great detail, elsewhere.

The conclusion of (B), likewise, appears to be a statement of supervenience. But, surely, there will be the objection that (3) is not a supervenience relation. But how could it be that a valid argument, consisting of statements of supervenience, could consist in a conclusion which does not express supervenience? Secondly, (3)'s expressing supervenience seems, entirely, possible on, say, Davidson's definition of 'supervenient'. (3) asserts, on a supervenience interpretation, that a person, whether me or someone else, who engages in behavior other than B, say B*, will differ in respect of some neurological property, P*. Presently, I cannot see any reason for rejecting the possibility of behavior supervenieng on neurology – while not excluding the possibility that mental events supervene, likewise, on neurological states. Restricting ourselves to the formalities, argument B is just as valid as (A). I set aside the question of why two sets of neurological events are allocated to behavioral and mental events. But notice that these arguments cannot both be valid without raising serious questions about, exact, role of the supervenience.

If we accept both of these arguments as valid, by conjoining the conclusion of (B) with the second premise of (A), we derive '(-P > -B) & (-B > -P)'; but, then, we have something like counterfactual equivalence. The problem is that supervenience is supposed to express a dependency, but what is "given" by the supervenience expressed by '-B > -P' is "taken away" by the causal dependency expressed by '-P > -B', causation and supervenience appear to be in competition and dependency becomes an ambiguous idea, even within this restricted context. While Kvart acknowledges that there is some disagreement over whether causation is transitive he is adamant in claiming in general the intransitivity of counterfactuals.

Kvart bases much of his criticisms of Davidson on this fact, even though Davidson does not _explicitly_ invoke the transitivity of counterfactuals. Short of acknowledging a counterfactual theory of causation, Davidson need not adhere to this theory. It may be argued that all he may require is the transitivity of causation; that is, that all he needs to show that mental events make a difference to behavior is that the mental event at issue is *a* cause of behavior, B. 'Being a cause of' seems to be transitive in the required sense on such occasions as involve the Will. Kvart is clear in drawing an important distinction between causing and being a cause ("Notes" p. 2), but this distinction, or something very much like it, has been around, at least, since Aune, and Aune makes the point that causing is not transitive, except where special conditions **are** satisfied. (Reason and

Action p. 10). Again, the reader must keep in mind that both arguments require the transitivity of counterfactuals, and that we will have to defer pursuing the implication of these remarks following an examination of the case in which the transitivity of counterfactuals is valid, according to Kvart. It is important to remember that counterfactuals play no role in Davidson's argument as stated. Kvart, without argument, maintains that in the context of Davidson's argument "the natural construal" of what it is to "make a difference" is "indeed counterfactual." I don't see this. In fact, there is another, easily, discernable interpretation, even if it is not one that Davidson would relish invoking. A relation can "make a difference" to the things standing in that relation in such a way as to affect the causal relations between those things, even where a counterfactual reading of that making a difference is not to be preferred. For example, one object, T, is heavier that another, S. This makes a difference as far as concerns the weight of these objects. Weight is associated with causal properties and, so, the relation of one being heavier than another "makes a difference" to the causal properties of the objects. This is the "natural" construal: counterfactuals don't enter, although one might upon examination construct one for special purposes. More generally: whenever a relation is "internal" (in, say, the sense of Bradley etc) it "makes a difference," often with little, if any, counterfactual characterization. The point to be made is that, like "common sense," the expression "natural interpretation" is fraught with complexities which, in the absence of substantive argument, can disarm a good argument. Perhaps this is such a case.

Not only do we have an embarrassment of riches by being in possession of a number of concepts, all of which have an uncertain relationship to the transitivity problem, such as, 'being *a* cause of', 'being *the* cause of' and 'causes', we have the added possibility of non-counterfactualist interpretations of each.

In resisting epiphenomenalist criticisms of Kvart's rendering of Davidson's argument, Kvart pursues the possibility that there may be a way around the intransitivity of counterfactual conditionals. To this end he proposes a "valid subinference" in which transitivity applies.

The significance of such sub-inferences to the philosophy of mind is not a question logic, alone. One way of framing an approach to this question is to ask another: Is there a way of engineering a system of counterfactual logic which allows for transitivity of counterfactual conditionals? This may sound a bit unfair, as if such "subinferences" were merely "made up." In the case of some relations, intransitivity is not subject to "engineered" qualifications, allowing for transitivity. For example, there is no conceivable way in which the relation 'differs by 2' can be made transitive. So what is the difference? That is, generally, what is it that affords the possibility in some cases of engineering such qualifications? I cannot, presently, offer a satisfactory answer to this general question. Rather than address it, let's consider what Kvart might have in mind.

When Kvart speaks of a "subinferences" it is not altogether clear what he means. He points out that the issue is not whether the conditional is "anti-transitive," and by this I take it that he means that the relation (in the broad sense) expressed by the counterfactual

conditional is like 'brother of' rather than 'differs by 2'. There is some risk that this approach is philosophically without significance. Suppose someone maintains that in a certain "subinference" we can get from 'a loves b' and 'b loves c' to 'a loves c' with the added condition that anyone b loves a loves? In a way, this is what Kvart does. Is the suggestion, vacuously, formal? I don't believe so, inasmuch as Kvart's program does illuminate a need to look carefully at the logical relations involved where supervenience may be pitted against epiphenomenalism. I will touch on this later. However, before proceeding to this and intervening issues, I want to say something about Kvart on "preservational counterfactuals." Doing so will not be easy, and the reader ought be apprised of the fact that in this section of Kvart's paper there is reliance on ideas not fully explained, relying as they do on other papers where this and related issues are discussed. Because I, too, have had to rely on things I've said elsewhere, this is not intended as a criticism; but it does constrict the moves we can make in examining his point of view with respect to this particular issue. I am not a Kvart "scholar" and, so, I will try to limit myself to what is self-contained in his interesting essay.

At issue is the idea that, if a counterfactual is true, then a causal statement is true: $^{A} > ^{B} => A c B'$ ('A c B' meaning that A causes B). This may be the case within certain limits. The problem is to discover those limits and incorporate them into a theory of causation based on counterfactuals. Since Kvart's treatment of "preservational counterfactuals" in this particular essay is a bit murky, I will raise a couple of points relating to it mainly by way of raising questions, after which we shall proceed to the proposal of a sub-inference and its application to epiphenomenalism.

An important component of D. Lewis' original theory of counterfactuals was the idea that "backtracking" must be excluded from a counterfactualist approach to causation. Suppose there are three events, A, B, and C. Further, allow that A causes both B and C, and that C occurs earlier than B; assume also that causes precede effects on any viable theory of causation. If ${}^{\sim}A > {}^{\sim}B => A c B'$ were unrestricted, then we would be faced with the following problem of "backtracking." Backtracking, if B had not occurred then A would not have occurred, then ${}^{\sim}B > {}^{\sim}A'$; and if A had not occurred then C would not have occurred, i.e. ${}^{\sim}A > {}^{\sim}C'$, but now it would appear that we have it that ${}^{\sim}B > {}^{\sim}C'$ and, therefore, 'B c C'. But since C precedes B, this cannot be the case. Now what I find peculiar, and what may signal a misunderstanding of the argument, is that the inference, here, requires transitivity of counterfactuals. So if transitivity of counterfactuals is ruled out, backtracking was never a possibility to begin with. Moreover, any proposal that may be set forth in order to preserve transitivity may reinstate backtracking, or at least part of the motivation for its exclusion. At this point we turn to Kvart's formulation of a valid sub-inference of counterfactual transitivity.

Significant aspects of Kvart's proposal rely on ideas and notation he has discussed elsewhere. Since it will not be possible to take all these into account, and so as not to prejudice, against, his case, I will consider only what I regard as essential to his argument and, more or less, clearly presented in his essay. Keep in mind that the essay he has, to date, made available is a *rough draft* and I intend no valuation of the manner in which the

arguments and conclusions have been presented. With this in mind I will state what I take to be the core of his proposal.

Returning to argument form (I), above, we are considering three sorts of events. Sometimes Kvart uses 'event' and 'premise' interchangeably, but for our purposes this will not present a problem. While we are speaking of "sorts" it must, nevertheless, be kept in mind that we are talking about particular events. Thus in (I), 'M' stands for a particular event and not an event kind. This is, highly, significant, but not, highly, significant for what is of immediate interest: the alleged valid sub-inference. Suppose, then, that we are dealing with the three events named in (I). I will formulate the premise Kvart offers in order to "secure the validity of counterfactual transitivity" in the following way (with the caveat that, while marginal, the uncertainties of notation are being overlooked). The event, P, occurs at (or at the same) time as M; the event intermediate between P and B occurs at some time between P and B. The premise, then, is this (where 'E' refers to events intermediate between P and B):

P) If M is a cause of E then P is a cause of E, for all E.

(P) is, actually, a rendering for the particular case of Kvart's more general formulation of the principle; for simplicity I have substituted terms appropriate to the argument form (1), above. There are a couple of additional premises, but this one is central and it is this one of special interest. The central issue now becomes: does this valid sub-inference allowing for transitivity of counterfactuals apply in the case of Davidson's argument, or something like it? I say "something like it" because Kvart argues that as stated Davidson's argument may be invalid for more than one reason. In other words, even if we grant that such a subinference is valid, is it the case that this subinference is operant in arguing for the causal efficacy of the mental? It is significant that Kvart offers *no* other instance in nature, or elsewhere for that matter, where the subinference obtains. He has argued for its conditional validity, but up to this point it may be little else than a vacuous formalism, a merely potential logical "bling-bling" and little else, as far as philosophy of mind is concerned. Notwithstanding this fact, we continue by examining whether in this instance, even if in no other, it has application. Still, if this is its only application, there is reason for concern.

The Attack on Epiphenomenalism

The failure of transitivity in the case of counterfactual conditionals argues against the causal efficacy of mental events; thus, it supports epiphenomenalism. Kvart applies his sub-inference in order to rescue mental causation by supplying valid cases of counterfactual transitivity. Assuming relevant conditions that are of no concern to us, what Kvart maintains (**D**) that

... if all intermediate actual events in this interval of which M is a cause are such that P is also a cause of them, then the validity of the above inference is assured, despite invalidity of counterfactual transitivity. (op. cit. p. 21)

Kvart is quick to point out that if epiphenomenalism is true then the antecedent of this conditional is vacuously satisfied, since M causes no events. But, now, recall that Kvart accepts a counterfactualist theory of causation. What this entails is that if (P) is satisfied (in this case vacuously), then, given the counterfactualist claim that ' $\sim M > \sim B => M c B$ ', epiphenomenalism entails that mental events possess causal efficacy; but this is a contradiction, since epiphenomenalism denies the efficacy of the mental. This, however, is insufficient to dispose of epiphenomenalism, since the epiphenomenalist may deny '~M > ~B = M c B', while accepting the intuitively acceptable '~M > ~B'. But if this is acceptable to the epiphenomenalist, then so is Davidson's original argument! Hence Davidson's argument is consistent with there being no causal efficacy of the mental, a conclusion he wanted to argue against. For this reason, and the reason of the intransitivity of counterfactuals, it can be argued that Davidson has failed to establish his claim. We have it, then, that on the epiphenomenalist account ' $\sim M > \sim B$ ' is true, although 'M c B' is not. However, since M is causally irrelevant to B, the semifactual, -M > B is, also, true. Epiphenomenlism, Kvart concludes, entails ' $\sim M > B \& \sim M > \sim B$ '. This, he avers, is a contradiction. Now I am not so sure that this is the formal contradiction he alleges. since it is not of the form 'p & \sim p', but it is sufficient to raise serious enough questions about epiphenomenalism.

What IS the Denial of Epiphenomenalism?

In stating his logical argument against epiphenomenalism, Kvart takes great pains to indicate the assumptions he makes and the logical relations that are required if his argument is to go through, but when it comes to what Russell called "general philosophy" rigor gives way imprecision. The only discussion of epiphenomenalism per se is his statement that it means that "the mind is not causally efficacious." Up till now we have no clear idea of what is meant by 'mind'. This is unimportant if it is believed that what the mind is is irrelevant to whether it is identical to physical states. Physicalists, typically, feel little obligation to describe what it is that is being rejected. "The mind" may refer to events, selves, processes, families of mental events, mental states, mental actions etc. Kvart appears to be restricting "the mind" to mental events, since these are the most likely candidates for being the relata of the causal relation. Still, even this is not without controversy as anyone apprised of the literature on "agent causation" might point out. But this is a matter that within the narrow purview of our immediate interest is less important than discovering whether his argument goes through. I am going to argue that, even if it does, it is not sufficient to establish the reality of mental causation. Let's state more carefully what epiphenomenalism has been traditionally been taken to be. We shall say that epiphenomenalism is the view that for all events, x and y, if x is mental then it is not the case that x causes y. The denial of this general claim logically entails that there is an event, x, which is mental, that there is another event which may or may not be mental, and x causes y. This is all that the denial of epiphenomenalism entails on what I shall regard as the standard view. But if this is *all* that is implied, that does not answer the question of whether mental events cause behavior by causing neurological states. The argument, if it is valid, is sufficient only to establish the general claim: some mental event causes some other event. In fact, only if argument form (A) is made valid by way of satisfaction of condition **D** can epiphenomenalism be shown invalid on the basis of

Kvart's argument. But this is to say that if it can be shown that the causal efficacy of mental events can be demonstrated by (A) then and only then is epiphenomenalism demonstrably false. So, given, that the claim of causal efficacy is true that of causal impotence is false; hardly a startling conclusion. But, even, if this tangle can be undone, there is a further problem.

The Current Oversimplification of What Epiphenomenalism Is

It is, usually, claimed that epiphenomenalism rules out causation of mental events by mental events, as well as causation of physical events by mental events. If one assumes that all causes of physical events are caused by physical events, e.g. Kim. (*Physicalism, or Something Near Enough*. Princeton. 2005. p. 15), while rejecting epiphenomenalism, one does not necessarily deny another form of epiphenomenalism, one limited only to the claim that mental events do not cause physical events. This is not a crucial detail, since mental causation insofar as it interests us, presently, is mental causation of action. However, the tendency to oversimplify, has led to confusing the sense of epiphenomenalism which affirms mental events that are not, also, physical but which are caused by physical events with the sense of epiphenomenalism which affirms of any single event that the presence of one mental properties depends on that of physical properties. This is significant, if only because it is the second sense which expresses Davidson believes mental properties "make a difference." There are additional problems associated with such oversimplifications.

Another is that it shrouds a rich philosophical content, particularly when the subject is brought to bear on the nature of agents and person, generally. Broad alleged that it is possible that a mental event may exist in the absence of Selves (Mind and Its Place in Nature, p. 319-20). We may be as certain of a fly's being in something like our pain about as certainly as we can be sure that a person other than ourselves is in pain, but we can easily doubt that this pain is "owned" by a Self. What epiphenomenalism is, then, can be dealt with in cases of sentience just as easily as in the case of introspective mental events, there being no point on physicalist dogma to entertain the possibility that sensations, for example, are not mental in the way memories, intentions, etc., are mental. Whether a toothache is causally efficacious is dealt with in the same oversimplifying tones as the suggestion that beliefs may be. In addition, the question of the epiphenomenal status of Selves contra "tweaks" is submerged in the process. On the view taken, here, mental events are elements of mental processes and, as such, cannot stand alone, as in the alleged instance of the fly. Moreover, the formulation of epiphenomenalism which lumps together mental events' causing physical events with mental events' causing mental events simply excludes a priori any discussion of what connects mental events in the case of a single Self: there can be no durational mental events in a relation of, say, immanent causation, if we reject every form of mental causation; and if oversimplifying epiphenomenalism is not enough, we can, always, invoke a "principle of causal closure."

The Empirical Status of Mental Causation

In the particular case, such as the one relating mental events to neurological states (Davidson's e.g.), there must be independent justification for alleging that the mental event causes the physical event. We are back to arguing on the basis of empirical evidence; a priori arguments will not suffice to establish the truth of mental causation. Causation may not be one sort of relation, where differences involve only differences in relata. The empirical fact may be that only one sort of causal relation can relate mental and physical, a causal relation having characteristics presupposing more than event-event causation may allow. In short, Kvart's argument applies only under certain conditions, conditions that may never be empirically satisfied. Indeed, the mind-body problem may be solved by neurologists and not by way of *a priori* arguments emanating from mind-body theorists in philosophy whose concept of the mental is constricted by searching for some application yielding a "logical bling-bling." This is not to say that Kvart's main argument via condition **D** is a "logical bling-bling," and that unless it is used as such its philosophical value is limited.

While Kvart does not succeed in all that he set out to do, his condition **D**, does establish a necessary condition for establishing the viability to Davidson's argument. This in itself is an important contribution to the discussion; but the issue at hand, the efficacy of the mental, will not be established by way of argument, alone. To this extent Kvart does not succeed. The problem is that the mind-body problem is an empirical issue, not a logical issue; although the demands of logic must be satisfied by any proposed solution. I will conclude with a proposal for a solution. Since elaborating this proposal is the subject of a, lengthy, unpublished manuscript, I will only hint at a solution. The exigencies of space, time, and circumstances require that I do so dogmatically, until such time as the larger theory has been formulated with greater precision.

Causation is a family of ideas. The causation we associate with an eclipse is not the causation we would associate with photo-electric effect unless, of course, we are Humeans and causation is, just, a relation between beliefs. Event-event causation will not accommodate processes. Processes are more fundamental than events. Events can be defined in terms of subsets of intervals of processes. They can be likened to open sets in topology. Causation is probabilistic, in much the way that Reichenbach has suggested, but with technical emendations that go beyond the scope of this paper. Transitivity of causation is dependent on empirical considerations that relate to various degrees of probability. The closer we approximate to causation as a relation between processes the further we recede from event-event causation. The suggestion that process causation can be reduced to event-event causation is not a foregone conclusion. It can be challenged, but meeting such challenges is not essential to the proposal. All we require is a contrast, not a demonstrable difference, although that may be possible (and I believe it, is).

Transitivity of causation is a matter of probability, not an aspect of our *a priori* concept of cause. Take an instance of purported event-event causation: I surmise that if I hit the cue ball, causing it to move, the motion of the cue ball will cause the six ball to move, causing the four ball to enter the side pocket. The last three events of interest, then, are the cue ball's moving; the six ball's moving; and the four ball's going into the side

pocket; call these event's A, B, and C. I judge, before, making the shot that if A happens and B happens, then the probability of A causing C is such and such. Next, consider three gears that mesh; if I turn the first, this causes the second to turn, causing the third to turn. Label these events A', B', and C'. I surmise that if I cause A', then B' will follow, resulting in C'. Further, I infer that the probability of A' causing C' is such and such. In fact, under these prescribed circumstances it is difficult to even imagine an intervening event such that A' will not cause C', in some sense of 'cause'.

Return, now, to Kvart's condition **D**. In the billiards case, where the events between B and C are "intermediate" events and A is a cause, if it should be the case that B is, also, a cause of them, then A is, by hypothesis, the cause of C, notwithstanding the general intransitivity of causation. It is questionable whether in this instance A is a cause of any of the, relevant, intermediate events. But, next, consider the gears case. In this case, as specified there are, quite possibly, no relevant intervening events, and the fact of A's causing events intermediate between B and C is questionable only on the basis of unlikely scenarios, to say the least. This empirical circumstance meets **D**, whereas the billiards case does not. This reflects the kernel of truth in Kvart's sub-inference proposal. What it misses is that the position cannot be sustained in the way he suggests, insofar as we understand it. The truth or falsity of supervenience is, largely, tangential; indeed, it is a dubious idea in the first place.

The contrast between the gears case and the billiards case is fundamental to any classification of types of causation. It may be (and I believe it is) the case that mental causation may vary between the two (or more) kinds. What Kvart has shown is that with the help of **D** the logical conditions for transitivity of counterfactual conditionals can be a "logical bling-bling in the philosophy of mind; a fact we applaud as something of an advance in rescuing the mental from both the trivial characterizations typical of inchwide and mile-deep investigations of the mental.