Michael Pauen, Alexander Staudacher
and Sven Walter

Editors' Introduction

Epiphenomenalism: Dead End or Way Out?

1. Epiphenomenalism

Many philosophers take it for granted that epiphenomenalism is obviously a dead end for an understanding of the human mind and its relation to the physical world and nothing but a counterintuitive theory of last resort. Others, by contrast, think that epiphenomenalism might be the way out of some of the severest problems discussed in the philosophy of mind during the past decades.[1]

Traditionally, epiphenomenalism amounts to the claim that mental events are caused by physical events in the brain although mental events themselves do not cause anything. Mental events may seem to affect the causal course of the physical world, for instance by bringing about behavioural effects, but, in fact, the psychobehavioural sequences we observe in our everyday experience of ourselves are only due to the causal processes at the underlying physical or neurophysiological level.

As a label for a philosophical theory of the mind, the term 'epiphenomenalism' (an 'epiphenomenon' being something like a 'secondary symptom') was coined by William James (see James, 1879) in his criticism of the position of the British biologist, physiologist, and philosopher Thomas Henry Huxley whose *Presidential Address to the British Association for the Advancement of Science* from 1874 — aptly entitled 'On the Hypothesis that Animals are

[1] The papers in this volume, with the exception of Brian McLaughlin's contribution, were among those read at a workshop on epiphenomenalism in 2003 during the fifth conference of the *German Society for Analytical Philosophy* (GAP) in Bielefeld, Germany. We are grateful to the participants and the audience for engaging discussions and ideas and we would like to thank the *Fritz Thyssen Foundation* and the GAP for their financial support.

Automata, and its History' — contains one of the earliest explicit articulations of epiphenomenalism. Mental events, Huxley claims, are caused by brain events, but are themselves incapable of causing anything. Just as the steam-whistle is an effect of the engine's operations without any causal influence on it, mental events are causally otiose effects of the neurophysiological mechanisms that cause our behaviour (Huxley, 1874, p. 240). We are aware of psychological or psychophysical sequences that make up our everyday life, but this is not an awareness of causally effective processes. Pains, for example, do not cause wincings, but are themselves caused by the same neurophysiological events that cause wincings, and to assume that the regular succession of mental and physical events reflect *causal* processes is to commit the fallacy of *post hoc ergo propter hoc*.

The strict dualism of mental and physical events, characteristic of traditional epiphenomenalism, is nowadays no longer uncontroversial. In modern philosophy of mind, many endorse a psychophysical *event identity theory* according to which every particular mental event is (identical to) a particular physical event. In that case there is no problem explaining how pains can cause wincings since pains can simply be identified with those neurophysiological events which cause wincings. However, although most of us nowadays have abandoned the radical dualism of earlier centuries, some dualistic residue remains, for instance in the guise of mental *properties*, and this mental residue threatens to become epiphenomenal (see Kim, 1998; 2005). Events, the standard story goes, seem to cause what they cause in virtue of some of their properties and not in virtue of others. Suppose a soprano sings the word 'shatter' at a high pitch and amplitude, thereby causing a window to shatter (Dretske, 1989, pp. 1–2). The particular cause *c* of the shattering — the soprano's singing — is a *singing of a high C* and a *singing of the word 'shatter'*. Yet, *c*'s being a singing of the word 'shatter,' in contrast to its being a singing of a high *C*, is apparently *causally irrelevant* for its causing the shattering because the window would have shattered even if the words sung had not meant 'shatter' but something else instead. Considerations along these lines suggest that events cause their effects in virtue of some of their properties, but not in virtue of others. If that is correct, it makes sense to ask whether mental events cause their effects in virtue of their mental, in virtue of their physical, or in virtue of both kinds of properties, and there seem to be reasons for thinking that mental properties are as causally irrelevant for physical effects as the singing's being a singing of the word 'shatter' is for the shattering, so that they are, in a sense, epiphenomena.

Philosophers therefore distinguish between *event-* and *property-epiphenomenalism* (see McLaughlin, 1989; 1994). According to the former, *physical events* are causes, while *mental events* cannot cause anything; according to the latter, events are causes in virtue of their *physical properties*, but no event is a cause in virtue of its *mental properties*.

2. Dead End?

Epiphenomenalism is typically considered to be a 'crazy' theory of last resort to which one is driven only in an act of desperation because all alternatives are even less satisfying. It has been deemed 'thoughtless and incoherent' (Taylor, 1956, p. 198), 'unintelligible' (Benecke, 1901, p. 26), 'quite impossible to believe' (Taylor, 1963, p. 28) or 'truly incredible' (McLaughlin, 1994, p. 284), and in his *The Fundamental Questions of Philosophy*, Alfred Cyril Ewing introduced it as a theory that can be disposed of in a 'conclusive fashion' (Ewing, 1953, p. 127). According to Ewing, '[t]hat epiphenomenalism is false is assumed in all practical life … and it is silly to adopt a philosophy the denial of which is implied by us every time we do anything' (p. 128). What many find so untenable about epiphenomenalism is, of course, its denial of *mental causation*, i.e., its denial of the mental's ability to causally influence the physical.

Our trust in the reality of mental causation, it seems, is too thoroughly embedded in our common sense conception of ourselves — as freely deliberating agents that are the causal origins of their actions and do what they do because they have the beliefs and desires they do — for epiphenomenalism to be taken seriously. Epiphenomenalism contradicts what one might call our 'manifest image' of the world and our place in it, entailing that what we believe, feel, sense, remember, etc., does not make a causal difference to what we do. Epiphenomenalism, that is, seems to render any kind of agency, moral responsibility, or free will impossible, thereby destroying everything without which we would apparently not be the kind of being we take ourselves to be, and without which we would apparently not be able to occupy the place in the world we take ourselves to occupy. (It does not matter here whether one talks about event- or property-epiphenomenalism: we not only take it for granted that, e.g., our desire for a drink [a mental event] plays an indispensable causal role when we reach out our arm to grab the glass in front of us; we also want to say that it does play this role *because* it is the *kind of* mental state it is [that is, a desire for a drink, an instance of a given mental event-*type*, *kind*, or *property*].)

That epiphenomenalism is a dead end, rather than a fruitful theoretical approach to the mind–body problem, cannot, however, simply be established by pointing out that it is *counterintuitive*. Defenders of epiphenomenalism will find its *prima facie* implausibility not in the least problematic. First of all, our intuitions might be the result of the *post hoc* fallacy mentioned above, and as such simply false (see Gadenne's contribution to this volume). Moreover, although it is no virtue for a theory to lack the recommendation of being in accord with everyday intuitions, it is not a death sentence either. A host of widely accepted and feted theories — Einstein's theory of special relativity, for instance, quantum mechanics, or the Freudian theory of the unconscious — are riotously counterintuitive; yet they are taken seriously, and rightly so. So what precisely is it about epiphenomenalism that makes it seem a dead end in our attempt to understand the mind and its relation to the physical world, in particular the brain?

Apart from being counterintuitive, epiphenomenalism faces a number of theoretical objections. First of all, it would seem to undermine (a) the ascription of *moral* and *legal responsibility* (because how can *we* be held responsible for what is done, strictly speaking, not by *us*, but by our brains); (b) the Davidsonian distinction between the reason(s) for which an action was performed and mere *post hoc* rationalizations; (c) the standard response to the *other minds problem* (the argument from analogy that infers like mental causes from like behavioural effects by which the existence of other minds is usually justified is obviously unavailable to the epiphenomenalist); and (d) the application of epistemic norms like *justification*, *warrant*, or *reasonableness* to beliefs (or processes of belief formation). Furthermore, causal theories of *knowledge*, *meaning*, *reference* or *memory* are widely accepted; yet, they apparently entail that causally otiose mental epiphenomena cannot be subjects of knowledge, reference, memory or meaningful statements, in which case we could not even have knowledge, memory, etc., of our own mental life (see the contributions of Birnbacher, Gadenne, Pauen, Robinson and Staudacher to this volume). Worse still, epiphenomenalism would even seem to be *self-defeating* because it seems that if it were true, it could not be known to be so (see Robinson's contribution to this volume). Finally, epiphenomenalism appears unable to account for the fact that our conscious mental life has *evolved* (see Birnbacher's and Gadenne's contributions). We currently have the features we have because they positively contributed to our ancestors' differential fitness, and a feature which endows an organism with an evolutionary advantage must make a *causal difference*; given that we have a conscious mental life while

our ancestors lacked it, the mental can thus not be a causally otiose feature.

These considerations, together with the apparent absurdity of epiphenomenalism, suggest that epiphenomenalism is little more than a 'crazy' and 'silly' philosophical idea which should be dismissed as soon as it is formulated because its denial 'is implied by us every time we do anything'. The question, however, is whether epiphenomenalism can be avoided as easily as Ewing and others suggest.

Modern non-reductive physicalism is a particularly telling example of why it might not be so easy. Many philosophers subscribe to this position because — by being a version of *physicalism* — it promises to respect the naturalistic attitude characteristic of our modern, scientific time, while — by being *non-reductive* — it also values what seems to be an indispensable part of our nature as freely deliberating agents, viz., the *autonomy* of our minds, and avoids the problem of multiple realizability that sunk the classical type-identity theory. It has been argued, however, that non-reductive physicalism is ultimately unable to account for the reality of mental causation, thereby collapsing into a version of epiphenomenalism about the irreducible aspect of the mental (see Kim, 1989a,b; 1990; 1998; 2005; and McLaughlin's and Walter's contributions to this volume). How can anything mental ever be causally relevant to my behaviour, if the latter can be fully accounted for without even mentioning mental causes like beliefs or desires? In particular, if mental properties cannot be reduced to physical properties, then how do they fit into the causal structure of the world, given that so-called 'downward causation' is not a particularly attractive alternative for physicalists? It would seem, then, that, contrary to the intentions of its proponents, non-reductive physicalism leads to epiphenomenalism. Since non-reductive physicalism has been the dominant position in the philosophy of mind during the past few decades, but has failed to come up with a satisfying account of mental causation, epiphenomenalism is still lurking in the background of our current theorizing about the mind. Although it seems to be a counterintuitive dead end, it has proved to be a recalcitrant position which cannot be so easily dismissed as many would want it to, and in 1989 Jerry Fodor could therefore diagnose an 'outbreak of epiphobia … [that] appears to have much of the philosophy of mind community in its grip', where 'epiphobia is the fear that one is turning into an epiphenomenalist' (Fodor, 1989, p. 137).

3. Way Out?

Epiphenomenalism evolved in an intellectual climate in the late nineteenth century in which classical dualism with respect to mind and body was as deeply entrenched in scientific thinking as a 'scientific naturalism' (Daston, 1982, p. 102) with regard to the world, in particular the human body. Epiphenomenalism resulted from an attempt to reconcile the scientific confidence that the world contains only physical factors as causes with the sustained trust that our mind is ultimately non-physical. Epiphenomenalists, in other words, are would-be *physicalists* who hold back from endorsing full-fledged *physicalism* because they do not want to give up the autonomy and uniqueness of the human mind.

One particular reason why philosophers nowadays hesitate to accept full-fledged physicalism is the notorious *qualia problem* that has been subject to a vigorous discussion in the past thirty years (see Gadenne's and Staudacher's contributions). Qualia are those properties of conscious mental states like pains or colour perceptions that are responsible for the 'phenomenal feel' of these states, for the fact that there is something it is like to undergo these states. Many philosophers doubt that qualia can be reduced to physical properties and thus be integrated into a physicalist picture of the world. One might, of course, suspect that qualia interact with the physical world, for instance by causing our behaviour, but this would mean that we would have to dismiss one of the most cherished principles of physicalism, namely the *principle of causal closure*. The conception of the physical as a causally closed system in which all forces are physical, combined with the naturalistic view that human beings are part of the physical world seems to leave 'no gaps' (McLaughlin, 1994, p. 278) to be filled by causally efficacious qualia or mental properties in general. Epiphenomenalism allows us to reconcile our scientific naturalism with the existence of non-physical mental properties, in particular qualia. We are part of the causally closed physical world, so that no non-physical causes have to be invoked in order to explain our movements. Since we also possess non-physical mental properties, the only conclusion is that these properties are incapable of exerting any causal influence (Jackson, 1982). As Alex Hyslop has put it: 'The case for Epiphenomenalism is the case for Materialism, together with the case against Materialism. The case for Materialism is the Argument from Science, from a triumphant, or at least steadily triumphing Science. The case against Materialism is that there are features of our

conscious experience that are not accounted for by Science' (Hyslop, 1998, p. 61).

This is the sense in which epiphenomenalism, far from being an unrewarding dead end in our theorizing about the mind–body problem, might be the way out of some of our most severe problems: whenever our trust in the causal authority of the physical is overwhelmed by our first person experience of ourselves as creatures with an essentially non-physical mind, epiphenomenalism is there to help.

Still, this observation alone won't be sufficient to motivate the adoption of epiphenomenalism. If epiphenomenalism is to be considered as a viable theoretical option, it has also to be defended against the objections mentioned above. The contributions of Birnbacher, Gadenne, Pauen, Robinson, and Staudacher explore whether or not this can be done. The proponents of epiphenomenalism will typically point out that many of these objections depend on the assumption that there is mental causation in a *literal sense*. What we actually can observe by empirical means, however, are only regular successions of mental and physical events. But the occurrence of such sequences doesn't require actual mental causation. To assume this would simply be to commit the *post hoc* fallacy. However, the objections against epiphenomenalism seem to be based on the widely shared assumption that physical events like behaviour do not only follow regularly upon mental events, but that their occurrence *depends* on the occurrence of the latter ('he wouldn't have cried if he hadn't felt the pain'). Here the proponent of epiphenomenalism can call attention to the fact that she can happily admit these kinds of dependencies, which are, furthermore, also part of her explanation of the possibility of knowledge of mental states (see the contributions of Birnbacher, Gadenne, Robinson and Staudacher). Finally, if epiphenomenalism is motivated exclusively by the qualia problem, one might restrict one's defence explicitly to the claim that only qualia are epiphenomenal (see Staudacher's contribution), and admit that mental events like beliefs and desires do have a causal role with respect to our behaviour.

4. The Contributions to this Volume

The eight contributors to this volume do not take a unanimous stance towards epiphenomenalism. Some of them are critical, some apologetical, and some remain neutral about the prospects of epiphenomenalism, focussing instead on its impact upon other prominent discussions and arguments in the philosophy of mind.

Bill Seager, in his 'Emergence, Epiphenomenalism and Consciousness', distinguishes between an *ontological* and an *explanatory* aspect of causation.

As far as the former is concerned, causation is a metaphysical, mind-independent relation that is responsible for any kind of 'go' in the universe and that is, to the extent that it is determined at all, determined by physical entities and their properties and relations alone. As far as the latter is concerned, causation is what surfaces in our finding the talk about high-level structures useful or *explanatory*. These high-level structures, Seager argues, might be useful or even practically indispensable, but they are nevertheless epiphenomena in the strict, ontological sense because they do not 'bring about' any effect, the 'causal work' being solely done at the physical level. Epiphenomenal high-level structures derive their legitimacy only from the fact that they are useful for us; they are 'visible' only from certain explanatory standpoints adopted by conscious subjects — for the world and its causal 'go', they are not needed. All this is part of what Seager calls the 'Scientific Picture of the World' (SPW). There is a problem with this picture once the epiphenomenal high-level feature in question is consciousness itself. In this case, says Seager, a paradox is lurking in the assumption that high-level phenomena are (merely) epiphenomenal, mind-dependent explanatory structures, because — perhaps unlike any other high level phenomenon — consciousness simply cannot just exist in the consciousness of an observer for whom it plays a certain explanatory role. According to Seager, this might be taken to suggest that SPW and its associated metaphysical picture of the world, with the only real causation going on at the physical level, is flawed or at least incomplete.

In his 'Is Role-Functionalism committed to Epiphenomenalism?', **Brian McLaughlin** asks whether a certain type of role-functionalism can equip the mental with the required causal role. Role-functionalism is a form of non-reductive physicalism which holds that no mental event token is a physical event token but that every mental event token is a functional event token, which is in turn realized by a physical event, where a physical event realizes a functional event iff it is the occupant of the respective functional role. According to McLaughlin, epiphenomenalism is to be rejected because it is absurd; to show that an account has epiphenomenalist implications, therefore, is to show that it is no viable option. Role-functionalists accept the conception of the physical as a causally closed system, that is, they accept that physical events have only physical events as causes and that physical events are causally related only in virtue of their physical properties. Given

that role-functionalism denies even the token-identity of mental events with physical events, one might ask, however, how mental events can cause physical events and how they can do this in virtue of their being *mental* events. Role-functionalists answer this question by admitting a kind of causal overdetermination, according to which a mental event has its effect *by means of* the underlying physical events that realize it, which have the effect in question. The singular causal transaction between the physical event and the effect implements the singular causal transaction between the mental event and the effect. In other words, even if the mental event is a non-basic cause, it is a cause nonetheless.

In order to explain how mental events can cause physical events, role-functionalists typically appeal either to David Lewis's counterfactual theory of causation or to the regularity theory of causation. With respect to the first theory, McLaughlin argues that it is incompatible with role-functionalism; with respect to the second theory, he claims that the most developed attempt so far that tries to combine the regularity theory with role-functionalism fails because it gives an implausible account of the relation between functional events and their physical realizers. In the light of these considerations, McLaughlin suspects that role-functionalism is committed to epiphenomenalism, although he admits that role-functionalism has great intuitive plausibility for mental dispositions, abilities and capacities, and that there is a sense of causal relevance which can be still legitimately applied to dispositions and the like even if they cannot be considered as causes in a strict sense.

In his 'Causal Exclusion as an Argument Against Non-Reductive Physicalism', **Sven Walter** concentrates on the way Jaegwon Kim has used the apparent absurdity of epiphenomenalism in an argument against non-reductive physicalism. Although non-reductive physicalism has been something like the received view in the philosophy of mind during the last two or three decades, it has recently come under pressure because it seems to be unable to avoid epiphenomenalism about mental properties (see above). Kim's well-known *causal exclusion argument* is intended as a *reductio* of non-reductive physicalism. According to Kim, irreducible mental properties would either have to be epiphenomenal or genuinely overdetermining; barring overdetermination, we can thus avoid epiphenomenalism only by giving up the irreducibility of mental properties, thereby effectively abandoning non-reductive physicalism. Walter argues that Kim's *causal exclusion argument* cannot be used in this way without begging the question against non-reductive accounts of causal relevance; i.e., one

cannot appeal to Kim's argument in order to argue that irreducible mental properties must be epiphenomenal.

Bill Robinson, whose contribution is aptly entitled 'Knowing Epiphenomena', defends epiphenomenalism against the so-called '*self-stultification objection*' according to which if epiphenomenalism were true, it could not be known to be so. If one accepts something like a causal theory of knowledge, knowledge of epiphenomenal mental states expressed by statements like 'I am in pain' or 'I am having a reddish experience' would be impossible, while at the same time epiphenomenalists appear to be committed to the possibility of this kind of knowledge. Epiphenomenalism would thus be self-defeating in the sense that its proponents would have to claim to know what, according to their view, they cannot know. Robinson rejects this line of reasoning by defending a *non-causal account of knowledge* based on the idea that epiphenomenalism is not only compatible with but even entails that our reports of our having mental events are *reliably correlated* with (though not *caused* by) our having those mental events. The main purpose of Robinson's paper, however, is to defend this line of response against what he calls the 'immediacy objection'. According to this objection, a reliability-based account of knowledge of mental events along the lines Robinson and others have defended (see the contributions of Gadenne, Birnbacher and Staudacher) cannot account for the *certainty* or *immediacy* of that kind of knowledge.

In his 'In Defence of Qualia-epiphenomenalism', **Volker Gadenne** concedes that epiphenomenalism is not free from difficulties, but insists that it is, all things considered, superior to its two main competitors, viz., reductive and non-reductive physicalism. After having sketched the standard line of reasoning leading to epiphenomenalism (something like Kim's *causal exclusion argument*), Gadenne answers the charges that (a) epiphenomenalism contradicts our everyday intuitions about ourselves and our causal role in the world, that (b) it makes any kind of knowledge of our own mental states impossible and that (c) epiphenomenal features could (or should) not have evolved. He offers reasons for thinking that these problems can easily be accommodated by epiphenomenalists and argues that a thoroughgoing epiphenomenalism is superior to both reductive and non-reductive physicalism, because the former contradicts our subjective experience — according to which (phenomenal) mental states are intrinsic properties and cannot be reasonably claimed to be something else — and the latter eventually collapses into outright property dualism and is, as such, unable to account for the possibility of mental causation.

As the title of **Dieter Birnbacher**'s contribution — 'Causal Interpretations of Correlations Between Neural and Conscious Events' — suggests, he discusses various causal and non-causal interpretations of the correlations one can observe between neural and mental events and the resulting stances one can take on the mind–body problem. Birnbacher argues that although neuroscientific evidence alone cannot definitely confirm or disconfirm any of these interpretations or positions, methodological considerations favour an epiphenomenalist interpretation of the relation between the mental and the physical, both for reasons of metaphysical parsimony and for reasons of coherence with established scientific principles. Like Robinson and Gadenne, Birnbacher then goes on to offer reasons for thinking that epiphenomenalism can cope with the objections that causally otiose mental events would leave unexplained the evolution and persistence of consciousness and that it cannot account for our knowledge of our own mental states without betraying the causal impotence of mental events upon which it is built.

According to **Michael Pauen**'s 'Feeling Causes', the claim of causal inefficacy of phenomenal properties undermines any effort to establish the nomological connection between mental and physical properties that is invoked by epiphenomenalism. While proponents of this position concede that variations of phenomenal properties in the absence of any variation of physical/functional properties are logically possible, they deny that they are nomologically possible. But if such variations have neither causal nor functional consequences, there is no way to detect them — not only in scientific experiments, but also from the first-person perspective. It follows that we cannot rule out that such dissociations actually occur — even in an unlimited number of cases. Pauen introduces 'part-time zombies' for a vivid illustration of this problem. Since absences or inversions of causally ineffective qualia leave no trace in the part-time zombie's memory, the zombie will not be able to discriminate between his present-qualia and his absent-qualia states. What is even worse, we cannot be sure that we ourselves are not part-time zombies, because, if we were, we could have no way of finding out.

In his 'Epistemological Objections to Qualia-epiphenomenalism' **Alexander Staudacher** argues for a very restricted form of epiphenomenalism according to which only qualia are to be considered as epiphenomena. As pointed out above, doubts whether qualia can be reduced to physical properties and the acceptance of the principle of causal closure motivate the claim that qualia are epiphenomenal. However, if one takes qualia to be the only obstacle to a thorough-

going materialist picture of the world, there is no principled reason to deny that other features of the mental exert causal powers. Consequently, many of the considerations to the effect that a general epiphenomenalism covering the mental as a whole is counterintuitive or even obviously false don't apply against qualia-epiphenomenalism. Even so, there remains the problematic question how we can ever acquire knowledge of qualia if qualia-epiphenomenalism is true. Like Birnbacher, Gadenne and Robinson, Staudacher argues for a reliability account of knowledge according to which a direct causal relationship between qualia and our beliefs about them is not necessary to qualify these beliefs as knowledge. He considers some objections against such an account and discusses in greater detail Michael Pauen's arguments, according to which qualia-epiphenomenalism is unable to establish that the kind of reliable relationship required for knowledge does indeed hold. Staudacher argues in effect that Pauen hasn't identified any specific problems for qualia-epiphenomenalism: if Pauen's arguments demonstrate that qualia-epiphenomenalism has a problem to establish that we have knowledge of qualia, similar difficulties will arise also for many positions claiming that qualia directly cause our beliefs about them. With respect to the 'part-time zombie' scenario, Staudacher claims that Pauen puts the standards for knowledge so high that sceptical consequences of a very general kind will follow threatening even Pauen's own account.

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