

Exit Epiphenomenalism: The Demolition of a Refuge

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Abstract

This article examines the background, implications and merit of the position of epiphenomenalism. Most of all, the authors systematically present an analytical argument against epiphenomenalism, the argument from the justification of the assertion of the existence of consciousness. It is shown that whereas epiphenomenalists claim to know that consciousness exists, they implicitly deny the possibility of knowing consciousness, since (according to their position) consciousness cannot have any influence on our knowledge. Similarly, the authors examine and reject the position of parallellism. Parallellism implicitly states it knows of the existence of an unknowable physical world. Consequences are mentioned for philosophy and empirical science.

Introduction

In this article we ask ourselves whether epiphenomenalism is a tenable position. Epiphenomenalism is the thesis that the mind or consciousness in the Cartesian sense of subjective experience (which comprises both perception and thought, and emotion and volition) is an epiphenomenon of the brain and therefore completely impotent. Firstly we will briefly situate epiphenomenalism within the philosophy of mind. Furthermore we will offer a sketch of its significance for contemporary philosophy and for empirical science. Then we will also give attention to the arguments that have been presented in favour of the position. In the second part we will look at the arguments that through the passage of time have been used against epiphenomenalism. In this part we will also present an argument that we believe demonstrates better than any other its internal inconsistency. Finally, in the third part, we will ask ourselves what consequences the disqualification of epiphenomenalism (as a tenable position) should have, both for the philosophy of mind and for philosophy in general, as well as for the empirical sciences based on these.

Epiphenomenalism

Epiphenomenalism holds that all mental phenomena, processes or conditions are nothing more than epiphenomena (by-products) of cerebral processes. Hereby one does not intend to say that the mental could not exist apart from the the physical (although this is indeed implied by it), but that the mental does not have any influence on reality. The subjective mind does exist, but it is not "efficacious", i.e. it cannot be the cause of anything, neither within its own mental dominion, nor within the physical world *2. For this supposed mental incapacity people have created illustrative images, like that of the steam whistle of a locomotive. The sound of the steam whistle constitutes a real phenomenon, but it does not influence the functioning of the loc, it is only an epiphenomenon of it *3. In a similar way, there are conscious

experiences that are inevitably caused by cerebral processes. Just as the steam whistle does not influence the functioning of the locomotive, neither does consciousness influence the cerebral processes by which it is produced.

Ontology and causality

Epiphenomenalism is an answer to the question of the causal influence of the mind or consciousness upon reality. The answer is that the mind does not exercise any influence. The mind is always only an effect and never a cause. As such, epiphenomenalism may be classified within so called physicalism. Physicalism states that everything that exists is the result of the laws which are valid for the physical world. It is important to make a sharp distinction between physicalism and materialism. Materialism is an ontological position that states that the only thing that really exists is matter -traditionally: "atoms in motion". Physicalism is not an ontological position [**clarification 2004**: in the sense of a position about the stuff or entities reality is made of], but only speaks of the types of causality that may exist [**remark 2004**: in this sense it may of course be called an ontological position after all, namely about the *ontology* of all **possible** forms of causal efficacy rather than about the ontology of real, **existing** entities]. Also despite the possible existence of an uncountable number of entities that never could be included in definitions of matter, only the material entities can exercise a causal influence. This leads to the conclusion that epiphenomenalism truly is physicalist. However, it is not a materialist position because the very reason that is given for the incapacity of consciousness consists of the fact that consciousness is not material. Thus, epiphenomenalism is a dualist physicalist position *4. There also are other forms of physicalism, which do have a materialist character. Thus, *an identity theory cannot recognize either that the subjective mind as such would be efficacious*, because conscious life following this thesis is in the objective sense identical to certain physiological events in the brain, and therefore the subjective properties don't matter causally in the objective sense. On the other hand, the eliminationist positions naturally deny any influence by the mind, for the simple reason that according to them the mind does not even exist. Within the philosophy of mind, epiphenomenalism is frequently used as though it were a synonym of physicalism. For this reason the identity theory is frequently called "epiphenomenalist" as well. This kind of confusion does not facilitate the debate over epiphenomenalism. Some of the arguments defended are either against or in favour of certain other kinds of physicalism. It is for this reason that we stress again that epiphenomenalism has a dualist ontology. It is this ontology that following the physicalist principle leads to the conclusion that there is indeed a mental life, but that that mental life does not exert any influence upon reality.

Dualism and psychogenic causality

Epiphenomenalism is one of the answers that dualists give to the question of psychogenical causality: the influence of mind on reality. It is the only completely physicalist answer within dualism. There are also two other dualist positions concerning this question. On the one hand we can find parallelism, that maintains a partial physicalism. According to parallelism the mind does exert causal influence

upon its own mental reality, but not upon physical reality. As in the case of physicalism, the material world would be completely determined by physical laws. An important difference, however, is that the material world does not influence the mind either. There would be a complete parallel causality between the two kinds of domain of reality. On the other hand there is interactionism, which also rejects physicalism within the material world. Following interactionism matter and mind both exert a causal influence upon themselves and on each other.

Implications of epiphenomenalism

In the philosophical sense, the major implication of epiphenomenalism is that what we do or feel is never caused by what we experience or have experienced. This implication goes much further than the negation of free will. As subjective beings, we are completely impotent confronted by the processes of the material world. We cannot exert any influence upon them, but we are completely determined by them. Our relations with reality, our relation with ourselves, with other persons, with objects, etc., are completely caused by physiological processes in the brain. Such relations never initiate anything. Thus, epiphenomenalism anthropologically implies an "imprisoned" consciousness that can undertake absolutely nothing and never has any power over itself. Naturally, this metaphysics has great consequences for the axiology and ethics. In fact, axiologically epiphenomenalism implies that all our values are biogenical; there are no values that would not be epiphenomena of neurological processes.

Anything that we human beings experience as transcendent to the purely biological, such as beauty, truth, or friendship, is in fact nothing more than the impotent product of physiology which is exempt of any value. This approaches a nihilist axiology. Why for example do many people find a certain opus of Beethoven moving?

Exclusively because their brains react in a specific way (causing emotions) to a certain auditive structure and because that physical reaction causes a certain positive subjective sensation, and never because of the qualitative experience of beauty itself. In the field of ethics not only do such concepts as responsibility lose their meaning, but any ethical ideal should be seen as exclusively caused by cerebral processes. The only kind of ethics that might be reconciled with this, is a strictly descriptive naturalism. In other words, the moral domain is completely determined by amoral neurology.

In psychology, epiphenomenalism implies that everything which is relevant for behaviour and cognition can in principle be completely simulated by machines (computers). The same goes for animal psychology and ethology: if human consciousness does not exert any influence, then the same must naturally hold for animal consciousness *5.

With regards to neuropsychology and psychiatry epiphenomenalism agrees with the thought that they should be completely determined by biology. In the case of psychiatric disorders it is therefore always essential to emphasize physiology (biopsychiatry).

Finally, parapsychology *6 which studies paranormal phenomena which occur under experimental conditions, is hardly conceivable given the presuppositions of

epiphenomenalism. Various parapsychologists consider their investigations as a possibility to evaluate the hypothesis of direct interactions between mind and physical reality, i.e.: investigations that aim at extrasensory perception, and at psychokinesis, by which the mind would exert influence outside its physical motoric apparatus *7.

Arguments in favour of epiphenomenalism

To opt for the epiphenomenalist position is not an arbitrary choice. In fact it consists, as has already been said, of a combination of dualism and physicalism. With the dualist element, epiphenomenalism avoids the objection against materialism that it would deny the existence of consciousness which it itself would need as a philosophical current, or which would reduce consciousness to something material and therefore to something unconscious *8.

For the remainder of this article, our attention will be directed towards the physicalist aspect of epiphenomenalism, not to its dualist ontology, which is shared by us *9. Therefore, this essay will explicitly not deal with any form of materialism, because -just like the epiphenomenalists and other dualists- we think it is evident that there are aspects of the subjective mind which a priori cannot be considered material in any way. In other words, the ontological debate should therefore be taking place before the debate about causal efficacy, not during, let alone afterwards. The mingling of these two questions that clearly differ from each other has already caused a lot of confusion. Although such may be very unpopular, we won't follow then the materialist fashion and we will only deal here with the problem of efficacy within a dualist context.

Epiphenomenalists present the following argumentation for their physicalism: 1. From a theoretical point of view, it is more parsimonious to adopt the physicalist position, because a) the physical laws are as far as we know valid for all types of physical organization, including the human organism and its brain *10. b) there is not a single empirical bit of evidence for a psychogenic effect on reality *11. 2. Interactionism is "inconceivable". It would boil down to "magic", as Jackendoff puts it *12. How could something mental cause something material? We will immediately leave this second point aside. If we cannot conceive of a psychogenic influence, then the somatogenic causation of the psyche is even more inconceivable, and it is on such "magical" causation that epiphenomenalism is explicitly based. We may add that any causality is essentially mysterious *13. In what follows, we will only consider acceptable the argument from parsimony. The principle of parsimony is important within the philosophy of science because it can lessen all kinds of unfounded speculations.

Arguments against epiphenomenalism

After our exposition of epiphenomenalism, it is about time we consider the counter-arguments. By the way, according to Hodges and Lachs *14, philosophers have attacked epiphenomenalism more often than that they have defended it. One can

imagine their motivation quite easily, if we look at the hardly attractive implications of that position for all kinds of fields.

Within the counter-arguments presented we can distinguish between four types: intuitive objections, arguments against the parsimony of epiphenomenalism, an argument against the validity of the position, and finally logical arguments directed against the internal consistency (coherence) of epiphenomenalism.

First we will discuss the arguments presented that we know and then we will present our own analytical argument.

Intuitive objections

The intuitive objections *15 against epiphenomenalism are obvious.

Epiphenomenalism does not harmonize at all with the image an average person cherishes of him- or herself. For common people it is evident that if they shout sometimes, it may be because they feel angry, or that if they smile to someone, it is because they feel sympathy towards that person, etc. *16 Epiphenomenalism goes against this intuitive concept of the existence of psychogenical causality. It would 'debunk' it, as it were, in the following sense: "People may believe that their conscious experiences matter causally, but they're just wrong, it only appears to be so. In fact, only cerebral processes and structures can have a causal impact on reality" *17. The intuitive argument that our daily speech would show innumerable examples of the importance of consciousness, is, of course, equally weak; in other words, language reflects such ideas as are conceived of by (common) people, and those ideas can, as has already been said, be completely erroneous. We do share the intuitive objections mentioned, but we are aware that in debates concerning epiphenomenalism they are not of much weight.

Arguments regarding parsimony

Among the arguments regarding parsimony one can make a subdivision between arguments that go against the epiphenomenalist's argument 1(a) and an argument against 1(b), both mentioned above. That is, against the universality of the laws of physics, and against the lack of empirical evidence for psychogenical causality.

Arguments against the universality of the laws of physics:

Argument based on evolution theory

The evolutionary argument was already entertained by William James *18 and recently it has been defended once more by Karl Popper *19. According to William James, the properties of consciousness indicate its causal efficacy. First of all consciousness probably becomes more complex and intense in the course of animal evolution. In this sense it is similar to a physical organ. Secondly, consciousness would be a kind of "selective agency", an instrument to make decisions with. Thirdly, the nervous systems which get more complex at every stage of evolution, do not only seem to adapt better every time, and to get more flexible each time, but also they seem to get more unstable with every evolutionary step.

It is for this reason, that consciousness would have originated, following James, as it makes choices, and thus prevents the brain from being lost in chaos. This is due among other reasons to the fact that only consciousness has something to choose, 'matters has no ideals to pursue'. Thus consciousness raises the probability of the maintenance of biological life. On this point, James reasons as follows: This plausible image offers a justification of the existence of consciousness. If consciousness does not matter, why would it ever have originated during evolution? Karl Popper formulates it as follows: 'If natural selection is to account for the emergence of the World 2 of subjective or mental experiences, the theory must explain the manner in which the evolution of World 2 (and of World 3) systematically provides us with instruments for survival" *20.

Now, the problem with the evolutionary argument is that its proponents don't realize enough that not all individual parts of an organism need to be functional from the point of view of evolution theory *21. A bear may for example have a thick and warm skin which is also very heavy. The warmth of the skin contributes to the bear's survival, but the weight does not. The weight is an inevitable epiphenomenon of the fact that the skin is thick and warm. Thus it is well conceivable that something inevitably originates as a consequence of a certain organization of genes without it having any importance for evolution itself. Therefore, it is incorrect to sustain that epiphenomenalism would inevitably contradict (neo)darwinism. It is not necessary for consciousness to have a positive effect in order to be conserved as a possible effect of evolution, but exclusively that it would not affect the probability of survival and reproduction in a negative way. This is precisely what is the case according to epiphenomenalism: Consciousness does not have any impact on anything, neither positive nor negative. With regards to James's argument *22 of the "selective agent" that consciousness would be: this is explicitly attacked by Ray Jackendoff. In reality, Jackendoff holds, it is a subconscious, 'computational' process of concentration and selection of certain information, that would in many cases effectively lead to experiences of conscious attention. The real selection and choice would thus take place at a subconscious level, not based on subconscious objectives and motives, but on its hypothetical subconscious "substrates" (= the hypothetical physiological structures underlying them).

Implication of teleology

Another argument supplied by William James, states that in cases of cerebral lesions certain functions can be suppressed and that afterwards they apparently can be transferred to other parts of the brain, which might indicate an efficacy that only can be related to consciousness. The problem with this argument is that it might be the case in fact that it should be explained by a kind of pre-wiring of the brain that would allow several parts to adopt several programs. There is no reason why it should be consciousness that would cause the transfer of functions, but it could be just the interactions between the demands that life imposes on the organism and the physiological possibilities of which it still disposes. The supposed teleology might in theory be just apparent.

Argument against the lack of empirical evidence for psychogenic causality:

Parapsychological data

John Beloff *23 is the main opponent of epiphenomenalism who founds his case on paranormal or PSI phenomena, viz. extrasensory perception (ESP) and psychokinesis (PK). Beloff believes that only PSI phenomena can demonstrate the efficacy of the mind. He explicitly rejects all the other types of argumentation. This attitude can be compared to that of Ray Jackendoff who holds that he could only be convinced by empirical data that his position is incorrect. Jackendoff does not say, however, what kind of phenomena these data would entail *24.

Since in his view only PSI phenomena might refute epiphenomenalism, Beloff considers parapsychology as one of the most important means of regaining our dignity and awareness of our human worth. He holds also that there are valid reasons to suppose that PSI phenomena really do exist. Furthermore, he states that PSI phenomena can be explained most easily by forms of psychogenic causality. Not only there is no evidence whatsoever that the brain might have completely unknown powers that might result in PSI phenomena. But also, he is convinced that PSI phenomena would show the same intentional activities as the ones studied by common psychology. Although it is conceivable that PSI phenomena are caused by something completely different from both mind and brain *25, this is not at all a plausible hypothesis.

Alfred Ayer *26 states that epiphenomenalism is defined in such a way that it would never be possible to refute it. In our opinion, however, PSI phenomena might be considered as phenomena, the physicalist explanation of which approaches zero to such degree, that the pretension of parsimony loses its power *27. Also, we think that parapsychology has sufficiently demonstrated that the existence of PSI is plausible. When philosophers such as William James *28, Gerard Heymans*29, Henri Bergson *30, and H.H. Price *31 included these phenomena in their philosophy of mind, the data were still more controversial than they are today. In the meantime, the evidence for the incidence of these phenomena is of such quality that some publications about them are accepted by journals of science *32 and also for example by the eminent American Association for the Advancement of Science.

Some renowned physicists seem to be inclined not to reduce the phenomena to autonomous physical processes, and they even include them within models that show interactionist properties *33. It might be emotionally difficult to seriously accept the existence of PSI phenomena, but at the end of the twentieth century this should not be an obstacle anymore to the right assessment of the abundant evidence in this field.

Argument against the validity of epiphenomenalism

This argument was also presented by Karl Popper *34. He holds that if a reasoning is really only realized on a physiological level, the epiphenomenalist cannot maintain the validity of his or her own position. The possible validity of epiphenomenalism is not a physical property but should be seen as a positive judgment on the position

based on abstract principles. Popper does not consider this point as a refutation of epiphenomenalism, but he does conclude that the epiphenomenalist cannot use any argument to defend him- or herself, as that would imply the recognition of the impact of immaterial principles. We agree with this argument of Popper. If the epiphenomenalist states that in the real world the only things that matter are physical entities, why does (s)he bother then about such things as "truth" and "validity"?

Arguments against the internal consistency of epiphenomenalism Several arguments have been formulated according to which epiphenomenalism contradicts itself. All of these arguments are structured as follows:

Epiphenomenalism does itself mention consciousness, while denying for example its efficacy. This implies that consciousness in one way or another has had an effect upon epiphenomenalism's argumentation and upon the ideas on which it is based.

The argument from the knowledge of contents of consciousness

The crudest form of the argument mentioned above states the following: Some epiphenomenalists are talking about all kinds of contents of consciousness, such as for example the experience of colours or sounds, and they hold at the same time that none of these contents would have any impact on reality. How is it possible then that those very same epiphenomenalists talk about contents of consciousness?

This version of the argument, however, can still be refuted by epiphenomenalism.

While talking about the contents of consciousness, one does not have to be talking, according to epiphenomenalism, about the contents themselves, but in fact only about the specific physiological substrates that constitute the supposed cause of any kind of subjective experiences *35. A proposition such as 'I see the colour red' would thus be caused completely by the supposed physiological correlate of the content of the consciousness concerned. That there would be such physiological substrates for any conscious content that exists, is a basic principle of epiphenomenalism: All subjective experiences would be caused by cerebral structures or processes *36.

The argument from the origin of the concept of consciousness

Where did our concepts regarding subjective experiences come from? This is the question which is raised by the second version of the logical argument. S. Shoemaker holds that it is qualia which are the cause of the existence of a belief in the existence of qualia. Following Shoemaker *37, one could maintain that people would think, talk and write about the concept of consciousness because they have formed this concept on the basis of consciousness.

Thus formulated, the argument is still not strong enough *38. First, according to the epiphenomenalists one could still well imagine a conceptual representation of consciousness within a system that does not possess any consciousness itself, but only an innate concept of consciousness. Secondly, talking about consciousness does not in itself prove anything regarding the presence of such consciousness, because one could also program a computer in such a way that it would produce verbal output about the concept of consciousness.

The argument from wondering about consciousness

Elitzur *39 states that consciousness does not have to be the cause of a concept of consciousness, but it does have to be the cause of the fact that "people are bothered by problems of consciousness". However, if it is possible that there is an innate concept of consciousness, which is not excluded by Elitzur, then the emotional interest concerning the strange concept of consciousness could be explained away as a subjective epiphenomenon of a purely physiological phenomenon. Physiological substrates of wondering about the supposedly innate concept of consciousness would lead to an experience of wonder and interest.

The argument from the justification of the concept of consciousness

We ourselves know three authors that completely independently from us have reached the following version of the logical argument against epiphenomenalism, they are: Michael Watkins, Dennett*40 and John Foster*41.

Reacting to an essay by Jackson of 1982 *42, Michael Watkins wrote a short article in the journal 'Analysis' *43. Jackson had defended in his essay the existence of epiphenomenal qualia which are completely impotent, i.e. qualitative aspects of subjective experience. To this Watkins reacted in the following way: 'Beliefs about qualia cannot be justified on the basis of qualitative experiences since those experiences do not cause those beliefs. The only evidence we have of qualia is our direct experience of them.' Daniel C. Dennett published in 1991 his 'Consciousness explained' after the formulation by Watkins and also after a first formulation of this argument by one of us *44. Although starting from a different philosophy of mind, functionalism, he shows in a similar way that epiphenomenalism is incoherent or internally inconsistent, and that for that reason it does not deserve any serious philosophical attention *45. On page 403 he says literally: : 'So if anyone claims to uphold a variety of epiphenomenalism, try to be polite, but ask: What are you talking about', and on page 405 he concludes: 'There could not be an empirical reason, then for believing in epiphenomena. Could there be another sort of reason for asserting their existence? What sort of reason? An a priori reason, presumably. But what? No one has ever offered one -good, bad, or indifferent- that I have seen.'

According to Stokes (1991) John Foster has stated in a discussion of the subject that if epiphenomenalism is valid, anything said by its proponents about mental events would lose its meaning as there could be no impact of such events on their own thought and words. In other words, the supposed validity of epiphenomenalism is self-defeating.

These philosophers have exactly hit the point in our opinion. In order to clarify this, we will present our own independent formulation:

- (1) Epiphenomenalism uses the concept of consciousness, as it states that there is such a thing as consciousness, which has got properties that are not material, etc.
- (2) Epiphenomenalism thus holds that its concept of consciousness refers to a real part of reality, namely to the (presumably) epiphenomenal but irreducible world of

mental experience.

(3) We have to be aware that even if the concept of consciousness had been innate, the reality to which it refers -consciousness- could only be established through introspection, i.a. by establishing that there are such things as conscious experiences. Epiphenomenalism starts from the reality of consciousness and it is based on the (introspective) evidence for the existence of conscious experiences.

There may be an innate concept of consciousness or not, in any case epiphenomenalism uses subjective experiences as a touch stone for such a concept. After all, it is absurd to think that the reality of something might be established on the basis that we have a concept of that entity (take for example the case of the unicorn). The only valid reason for supposing there really are conscious experiences is therefore the introspective observation that there are such experiences. If nobody would introspectively observe subjective experiences, there would be no reason to suppose that there really would be such a thing as consciousness.

Epiphenomenalism is forced therefore to found its unconditional acceptance on an introspective contact with that very same consciousness. Such a contact, however, equals a causal effect by consciousness upon the conceptualization processes of the one that contemplates his or her subjective experiences through introspection.

By the way, it is not necessary to conceive of the impact of consciousness in this process as a conscious 'act'. It suffices to conceive it as a 'factor', comparable to the causal status of an object perceived during the process of perception *46. In this respect, we might rephrase Berkeley by saying: 'percipi est movere' (to be perceived is to move). This view clearly contrasts with that of David Chalmers (1996) who seems to believe a real entity can make a difference for our knowledge without at the same time exerting a causal influence. Chalmers seems to overlook the fact that in order to have a realistic concept of something that entity must be somehow represented in memory (be it mental or neural) which means that the non-causal influence on knowledge postulated by him must in the end have a really causal effect after all. (**Added May 2005:** A similar mistake seems to have been made by Alexander Staudacher in his 2002 lecture *Qualia-Epiphenomenalism Revisited* at the Mental Causation-Conference at Bielefeld)

(4) Thus epiphenomenalism internally contradicts itself. It states that there would be a valid reason to postulate mental experiences, but proclaims at the same time that these experiences are completely unknowable, by denying them any causal impact *47. The inevitable conclusion therefore is that epiphenomenalism should be disqualified for good.

A possible defense by the epiphenomenalists would be at first sight that in this analytical argument we would encounter a dubious kind of 'justificationism', as not all theoretical entities must be justified directly by observations. Is it not enough that the entities would make a difference for the predictions that follow from the hypothesis? Perhaps this defense may seem to set the epiphenomenalist free from the need of founding his or her certainty that there really is such a thing as subjective awareness. However, the contrary is true. Even if we would take the case mentioned seriously, this would still lead us to the conclusion that consciousness needs to make

an impact, even if only indirectly, on the predictions about reality, and that influence would not be reconcilable with epiphenomenalism either *48.

Epiphenomenalism turns out to be a kind of obscurantism, an erroneous representation of (part of) reality in favour of conceptions that are considered indubitable, i.e. of physicalism *49, and of the irreducibility of the subjective mind. We might say that it is a 'refuge' for those physicalists who are not blind to their own subjectivity *50. The argument described above shows clearly that physicalism can no longer believe that it is safe from radical dualistic attacks.

Implications of the disqualification of epiphenomenalism

The disqualification of epiphenomenalism is, as we have just seen, inevitable. Now, we will give attention to the consequences of the disqualification of epiphenomenalism. Ray Jackendoff stated in 1989, confronted by our version of the argument from the justification of the concept of consciousness, that it might be wise to reconsider the reality of subjective experiences. Dennett has even a more extreme position. Starting from his own formulation of our analytical argument, he concludes that no one is conscious, at least not in the common, 'mysterious' and qualitative sense of the term *51. Both authors conclude in other words from the irreconcilability of physicalism and dualism that the concept of consciousness should be eliminated, i.e. sacrificed to the protection of indubitable physicalism *52. In fact we might qualify this as a contemporaneous form of blind and unfounded dogmatism.

On the other hand, it is interesting to note that both thinkers do not opt anymore for the materialist identity theory, but directly for reductionist materialism, which denies the existence of the subjective mind. This is so, because the identity theory also holds that only the so called 'objective' side to the subjective mind, i.e. the brain (or part of it), would have an objective impact on reality. However, this is impossible, as we have already seen, because for the justification of postulating a subjective mind, it is necessary to believe that subjective mind is efficacious qua subjective mind, and not only in the so called 'objective', physiological sense, as identity theory would have it. Therefore, as we are not going to imitate the opportunistic denial of consciousness, we will have to look for another variant with regards to psychogenical causality within dualism, unless we would go for idealism, which is a conception we will not discuss in this paper.

The disqualification of parallellism

Various authors *53 stress that parallellism and epiphenomenalism have a lot in common. Both positions state that for each and every subjective experience there is a physiological correlate. The difference is, however, that this correlate according to epiphenomenalism is the substrate of that experience, whereas according to parallellism it would only involve a parallel correlate. Now, parallellism should be disqualified for a similar reason as the one given against epiphenomenalism, it even is the mirror image of our analytical argument. Epiphenomenalism cannot reconcile its certainty that there really is such a thing as a conscious mind with the implied

impossibility of knowing the existence of consciousness. Parallellism, on the other hand, cannot reconcile its certainty that there really is a material world with the purported inability of that world to have an impact on the psyche. In other words, on the one hand, there would be no doubt according to parallellism that there is a physical world, but on the other hand it follows from the supposed parallel and strictly separate causality that the physical world cannot have any influence upon the psyche. Thus there is once again a contradiction: We know with certainty of the existence of a physical world, while at the same time we are certainly incapable of knowing that same physical world.

Therefore only interactionism is left as the sole possibility *54. This implies that the acceptance of the existence of irreducible subjective experiences (apart from the existence of a material world), or dualism, logically leads to interactionism.

Interactionism

As it seems, intuition was right. We certainly do count as subjective beings, we doubtlessly have an impact upon ourselves, upon our lives and upon our social and physical environment.

Also, axiology and ethics cannot be reduced to biogenical epiphenomena. In (human) psychology and in ethology and animal psychology *55, it should from now on be clear that consciousness is important for experience and behaviour. Apparently, it is at least a source of conceptualization. Any current or theory within these sciences that would be fundamentally irreconcilable with the existence of psychogenic causality, should be made aware of the untenability of the positions of epiphenomenalism and parallellism. We are not, to paraphrase Huxley, 'conscious automata'.

Furthermore, in neuropsychology and psychiatry the point of departure should be that there really are effects of consciousness upon processes in the brain. Cerebral processes are therefore not the only internal causes of behaviour and experience, but so is subjective awareness.

A psychiatry that wants to be beneficial cannot limit itself therefore to a purely physiological treatment.

Finally, the scientific theoretical status of parapsychology (which almost by definition contrasts with physicalism) is no longer an apriori problem within the framework of interactionism.

Literature

- Ayer, A. J. *Filosofie in de twintigste eeuw* (Dutch translation). Kampen, 1986.
- Beloff, J. 'Parapsychology and the mind-body problem'. *Inquiry*, 1987, 30, 215.
- Beloff, J. *The importance of psychical research*. London, 1988.
- Bergson, H. *L'énergie spirituelle: Essais et conférences*. Presses Universitaires, Paris, 1944.
- Bierman, D.J., Dongen, H. van, & Gerding, J.L.F. *Parapsychologie en fysica*. SPR, Utrecht, 1991.
- Bolzano, B. *Athanasia oder Gründe für die Unsterblichkeit der Seele*. Minerva, Frankfurt am Main, 1838/1970.
- Chalmers, D.J. *The Conscious Mind. In Search of a Fundamental Theory*. Oxford

University Press, New York & Oxford, 1996.

- Churchland, P. A contemporary philosophy of mind. MIT Press, Cambridge, 1990.
- Crane, T., & Mellor, D.H. 'There is no question of physicalism'. *Mind*, 1990, 99, 185-206.
- Dennett, D.C. *Consciousness explained*. Penguin Books, London, 1991.
- Eccles, J.C. *The human psyche*. Springer, New York, 1980.
- Elitzur, A.C. 'Consciousness and the incompleteness of the physical explanation of behavior'. *The Journal of Mind and Behavior*, 1989, 10, 9-10.
- Heymans, G. 'Over de verklaring der telepathische verschijnselen'. *Mededelingen der Studievereniging voor Psychical Research. SPR*, Utrecht, 1925.
- Heymans, G. *Inleiding in de metaphysica op grondslag der ervaring* (Dutch translation). Wereldbibliotheek, Amsterdam, 1933.
- Hodges, M., & Lachs, J. 'Meaning and the impotence hypothesis'. *Review of Metaphysics*, 1979, 32, 515-529.
- Huxley, Th. *Methods and results: Collected Essays, Volume I*. Macmilthen, London, 1898.
- Jackendoff, R. *Consciousness and the computational mind*. MIT Press, Cambridge, 1987.
- Jackson, F. 'Epiphenomenal qualia'. *Philosophical Quarterly*, 1982, 32, 134.
- James, W. *The principles of psychology, Volume 1, Chapter 5. The automaton theory*. H. Holt, New York, 1891.
- James, W. *Essays in psychical research*. Harvard University Press, Cambridge, Mss., 1986.
- Marres, R. *Filosofie van de geest: Een inleiding*. Coutinho, Muiderberg, 1985.
- Nietzsche, F. *Die fröhliche Wissenschaft* (new edition). Kröner, Stuttgart, 1950.
- Penrose, R. Quantum physics and conscious thoughts, in: B. J. Hiley and F. D. Peat (Eds.). *Quantum implications: Essays in honour of David Bohm*. Methuen, New York, 1987.
- Penrose, R. *The emperor's new mind: Concerning computers, minds, and the laws of physics*. Oxford University Press, New York, 1989.
- Plato. *Phaedo*, 36.
- Popper, K.R. en Eccles, J.C. *The self and its brain*. Routledge & Kegan Paul, London, 1977.
- Price, H.H. 'Some philosophical questions about telepathy and clairvoyance'. *Philosophy*, 1940, 15, 363-385.
- Radin, D., & Nelson, R. 'Evidence for consciousness-related anomalies in random physical systems'. *Foundations of Physics*, 1989, 1499-1541.
- Radin, D., & Nelson, R. 'Onverklaarbare relaties tussen het bewustzijn en toevalsprocessen'. *Tijdschrift voor Parapsychologie*, 1989.
- Ritter, J. *Historisches Wörterbuch der Philosophie*. Schwabe & Co, Basel, 1972.
- Rivas, E., & Rivas, T. 'Bewustzijn bij dieren'. *Antropologische Verkenningen*, 1991, 10, 2, 32-40.
- Rivas, E., & Rivas, T. *Afstudeeronderzoek 'Bewustzijn bij dieren'*. Psychonomie, Theoretische Psychologie, Utrecht, 1993.
- Rivas, T. 'Intrasomatische Parergie: Een overzicht van de directe invloed van

geestelijke voorstellingen op de fysiologie van het eigen lichaam'. Tijdschrift voor Parapsychologie, 1990, 58, 10-11.

- Rivas, T. 'Bewustzijn: Een overzicht van vraagstukken'. Berichten uit Psychopolis, 1992, 7, 2, 27-33.
- Rivas, T. Analytical argumentation and the theoretical foundation of psychical research I: arguments for the causal efficacy of mind'. The Paranormal Review, 1999, 10: 33-35.
- Rooijen, J. van. 'The philosophical position of applied ethology: A reply' (Letter to the Editor). Applied Animal Behaviour Science, 1985, 14, 379-383.
- Shaffer, J. 'Recent work on the mind-body problem'. American Philosophical Quarterly, 1965, 81-104..
- Shoemaker, S. 'Functionalism and qualia'. Philosophical Studies, 1975, 27, 291-315.

- Skinner, B.F. Beyond freedom and dignity. Knopf, New York, 1971.
- Stevenson, I. Children who remember previous lives: A question of reincarnation. University Press of Virginia, Charlottesville, 1987.
- Stokes, D.M. 'The case for dualism', ed. by J. Smythies & J. Beloff (Review). The Journal of the American Society for Psychical Research, 1991, 85, 388-393.
- Stokes, D.M. 'Mind, matter, and death: Cognitive neuroscience and the problem of survival'. The Journal of the American Society for Psychical Research, 1993, 87, 41-84.
- Vries, R. de 'Van wetenschapstheorie tot dierenleed: Wetenschapstheoretische opmerkingen over de plaats van het subjectieve in de natuur'. Antropologische Verkenningen, 1991, 10, 2, 75-76.
- Watkins, M. 'The knowledge argument against the knowledge argument'. Analysis, 1989, 49, 158-160.

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The content of the Spanish paper is practically identical to this English version, the main exception consisting of our present remarks about the position defended by David Chalmers.

Notes

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2. Eccles, 1977, pp. 17-18.

3. Huxley, 1898, pp. 31-38; James, 1891, p. 129. James also mentions as other images: foam, aura, or melody. A contemporary symbol is the small light or buzzing noise in computers which indicates that they are working, but which does not exert any influence upon their functioning. An additional symbol is that of a shadow.

4. Beloff, 1987, p. 215; Bergson, 1944, p. 40; Hodges & Lachs, 1979, p. 515.

5. See for example: Van Rooijen, 1985, pp. 379-383.

6. We refer here to parapsychology as the empirical study of anomalies, in which the possible existence of those anomalies is not a priori denied and in which the investigation is focussed at the study of their reality. In other words, we are not talking about the sociological or psychological study of 'paranormal' experiences which is based on the hypothesis that the phenomena are not (or cannot be) real.

7. Bierman, Van Dongen & Gerding, 1991.

8. Beloff, 1988, p. 217.

9. We hope it is clear that apart from eliminationism we also discard the various types of identity theory, functionalism and emergence materialism. In practice all of these positions can from an ontological point of view be seen here as forms of materialism, as all of them hold that the mind does not constitute a separate domain of reality, but that it can be seen -and this sense be reduced to- an "interior side", "pattern" or "level" of matter.

However, matter can by definition never be subjective, neither in a special manifestation of it nor on some kind of mysterious level. As Karl Popper has shown (p. 81, etc.) the negation of this fact leads to a pseudo-materialism which really is a kind of idealism, or to a definitory confusion (a form of obscurantism) in which the term "matter" becomes something like "reality" so that it cannot fulfill a distinctive

function in the debate any longer.

10. For example according to Leibniz, see Stokes, 1993, p. 45.

11. Jackendoff, 1988, personal communication. Compare this with: Heymans, 1933, pp. 85, etc.

12. Jackendoff, 1987, pp. 311-317.

13. James, 1891, pp. 136-137; compare: Crane and Mellor, 1990, p. 192. One of the best passages about this question can be found in Bolzano, 1970, pp. 86-87 (in our own free translation): " However, we have to presuppose the existence of immediate influences [in nature]... Because if we do not absolutely deny all mutual influences, if we do not want to maintain, against common sense, that in the whole of creation there would not be a necessary coherence between entities anywhere, if at least we do not want to do that, then we must admit there also exists some kind of immediate influence.

Because if such a thing would not exist, how could there be any indirect influence? However, immediate influences whether they occur between [ontological] substances that are individual or between complex objects or between, on the one hand individual simple entities and on the other hand complex entities, presuppose in all these cases something incomprehensible."

14. His source for this is "Shorter Oxford English Dictionary".

15. Compare: Roger Penrose, 1989, 527.

16. J. Shaffer, 1965, 100-101.

17. William James, 1891, 138-144.

18. Karl Popper (with Eccles), 1977.

19. Karl Popper, 72, etc.

20. Compare this also with Roger Penrose, 1989, 528.

21. René Marres, 1985, 161-162. We also refer to the more recent English translation of the book by Marres from 1989, In defense of mentalism: A critical review of the philosophy of mind.

22. Ray Jackendoff, 280-283.

23. John Beloff, 1987, 218-225.

24. Personal communication.

25. Beloff, 1987, 220. Even if there had emerged completely new and still unknown physical principles of the organization of the brain, we would not expect those hypothetical principles to go against the physical limitations of that same brain as an organical (physical) system.
26. Ayer, 1986, 221.
27. Compare: Ian Stevenson, 1987, 228. One might in theory still imagine spontaneous correlations between physical events and mental states, which could still be reconciled with epiphenomenalism.
28. William James, 1986.
29. G. Heymans, G., 1925.
30. Henri Bergson, 1944.
31. H.H. Price, 1940, 363-385.
32. D. Radin, & R. Nelson , 1989, 1499-1541 and also 'Onverklaarbare relaties tussen het bewustzijn en toevalsprocessen'. Tijdschrift voor Parapsychologie (1989). See: Bierman, Gerding and Van Dongen.
33. Bierman, Van Dongen and Gerding, 1992; this book contains contributions by Brian Josephson and Olivier Costa de Beauregard, among other scholars.
34. Karl Popper, 81.
35. Rob de Vries, 1991, 10, 2, 75-76.
36. For a more extensive refutation of this version, see: M. Hodges en J. Lachs, 1979, 32, 515-529.
37. S. Shoemaker, 1975, 27, 29, etc.
38. A.C. Elitzur, 1989, 10, 9-10.
39. A.C. Elitzur, 9; Compare: Roger Penrose , 1987, 16; Penrose, 1989, 528.
40. Daniel C. Dennett in his already mentioned *Consciousness Explained* of 1991.
41. In fact, the Dutch philosopher René Marres also mentions in passing the argument from the justification of the concept of consciousness. However, he speaks of a paradox rather than a contradiction as he states on page 183 of the book mentioned

before: "Therefore, an epiphenomenalist cannot hold that his belief in the existence of mental processes is based on that same existence." Unfortunately, Marres has clearly underestimated the value of this argument.

42. F. Jackson, 1982.

43. Michael Watkins, 1989.

44. See the paragraph 'Filosofische kritiek op het fysicalisme' in the article by Titus Rivas (1990, pp. 10-11) or his more recent article (1999).

45. D.C. Dennett, 402-405.

46. The very phenomenon of introspection is in itself necessarily an act of a conscious subject.

47. There still is another way to demonstrate the logical structure of the internal inconsistency of epiphenomenalism. Let's suppose a proposition A which reads: We know of the existence of subjective experiences (or 'consciousness'). Another proposition B reads: We cannot know of the existence of subjective experiences. Proposition B implies a proposition C, which reads: We do not know of the existence of subjective experiences. If we substitute "we know of the existence of subjective experiences" for a symbol D, epiphenomenalism can be represented as follows: it holds D and not-D at the same time, which clearly constitutes a contradiction.

48. Compare this with Dennett, 1991, 402.

49. The enormous influence that fysicalism has on the so called "hard" natural sciences, can be seen for example in the following statement of the famous cosmologist Stephen Hawking: "We already know the natural laws that govern everything that we experience in our daily lives."

50. Compare this with Churchland, 1990, 12: "It's a compromise between the wish to do justice to a strictly scientific approach to the explanation of behavior, and the wish to do justice to the testimony of introspection."

51. Dennett in his 'Brainstorms' of 1979 speaks of "mythical" where he mentions qualia.

52. In fact, the existence of personal consciousness, of our subjective inner life, is the only thing that can never be doubted. Compare: from a logical, analytical point of view it is possible to doubt that there is a material world (which ultimately may lead to idealism) or that there are other minds (the ultimate consequence of which might be solipsism), but it is irrational to doubt that my own (irreducible) inner of world of subjective and qualitative experiences is real.

53. For example: Karl Popper, 72.

54. We won't consider here exactly what interactionist (sub)theories are superior.

55. The presence of consciousness among animals is probable on the basis of the so called analogy postulate. See: Esteban and Titus Rivas, 1991.