

## A defence of speculative metaphysics

by Peter Ells

This is a vast topic, and I can only attempt to cover it in broad brushstrokes. My aim is to engender debate rather than present anything that is impeccably beyond criticism.

### **Metaphysics**

Metaphysics is notoriously difficult to define, but John Cottingham's (2008: 68) statement is excellent:

[Metaphysics is] philosophical enquiry that goes beyond the particular sciences and asks very general questions about the nature of reality and the ultimate conceptual categories in terms of which we are to understand it

Speculative metaphysics (Alfred North Whitehead's term) goes further than asking questions, and attempts to provide a rational, comprehensive system or model for understanding the cosmos both in its particulars and its entirety. A metaphysical system should have ambitions to be comprehensive – encompassing not just science but also ethics, aesthetics, mathematics, and so on. Of course, this ideal is extremely difficult to achieve.

For several centuries metaphysics has come under attack. Here are quotations from two eminent critics: Hume (1748), “[Any book on metaphysics should be] committed to the flames, for it can contain nothing but sophistry and illusion”; Ayer (1972: 55), “Philosophy, as a genuine branch of knowledge, must be distinguished from metaphysics. ... The majority of the ‘great philosophers’ of the past were not essentially metaphysicians.” Ayer's final point seems highly implausible; Democritus, Descartes, and Kant, for example, advocated distinctive metaphysical positions. Criticisms of metaphysics boil down to the fact that metaphysical systems are, by definition, non-empirical: otherwise they would instead come within the ambit of science. Ayer and Hume claimed that such systems were therefore meaningless.

My belief is that there is a true metaphysics of the universe, which philosophers attempt to approximate by creating metaphysical models. Doing this is somewhat analogous to scientists attempting to approximate the true (completed) physics of the universe in terms of their theories. If there were no such true metaphysics, then the universe would be a disjointed patchwork, with novel brute facts coming into play at each stage of its evolution. Atheists should reject such an account of the universe for its utter implausibility, and theists for its shoddiness. In opposition to Ayer and Hume, I hope to show how metaphysical systems can be compared rationally despite the fact that they are non-empirical, using two contrasting metaphysical systems as examples.

### **Berkeley's Idealism**

In Berkeley's system, the primary or foundational things that exist are minds or souls. Objects that we usually think of as ‘existing in the external spatio-temporal world’, such as a football or a river – even our own bodies and indeed the whole universe – also exist, but only as structured experiences within minds. All such objects are thus secondary in Berkeley's ontology, and for them he made the famous definition of existence: *esse est percipi*. (Berkeley also argued that mathematics exists solely as thoughts within minds (1710: introduction).)

As thus far developed, Berkeley's metaphysics is a cosmos of disjointed minds, each with its separate and unrelated contents. Something else is needed in order to bind it together into one coherent whole. Berkeley therefore proposed that the Christian God – an all-powerful and beneficent mind – plants percepts (in a lawful manner) in the minds of individuals, so that they have logical and consistent experiences: Water is a well-behaved liquid, consistently obeying the God-given laws of physics. Each person in a given situation has experiences consistent with the other persons present. Each member of a punting party, for example, can see their companions, talk to them and hear them, and so on. God also ensures the continued existence of (say) a ball when locked away from human observation in a cupboard: it remains an idea in God's mind and thus continues to exist under Berkeley's definition.

## **Berkeley's attack on matter**

Berkeley's attack on the concept of matter, defined as an insentient substance that exists in an external spatiotemporal universe, was a critique of Locke. Consider a putative material object – a desk. Locke argued that the properties of the desk could be divided into two categories: The qualitative colour brown of the desk, the qualitative scent of furniture polish and qualitative squeak of the drawer are all secondary qualities and exist only in the mind of the observer. The primary qualities of the desk are its spatio-temporal extension, form and motion. These are all characterised by being measurable, and only these, said Locke, truly exist in the external world. (Locke also included solidity as a primary quality, but this can be defined straightforwardly in terms of spatio-temporal behaviour.)

The true physical character of the desk is thus somewhat akin to an animated mathematical figure. Locke argued that the difference between a real desk and a mathematical object was that with the real desk there was an underlying substance called matter, which acted as a 'support' that bound its primary properties together into a whole. Berkeley rightly and roundly criticised this obscure Scholastic idea on the grounds that this substance was wholly unobservable and nothing could be known about it. Moreover the metaphor has no clear meaning: it cannot be "as the legs support the body" (1713).

Berkeley questioned the sharp distinction between primary and secondary qualities, maintaining that: (i). both were subjective: just as the desk would look grey in the twilight, so it would have a different shape when viewed from a different angle; (ii). primary and secondary qualities are inextricably bound together: the rectangular shape of the desktop is only revealed by its colour, contrasted with its background. He went on to argue that since secondary qualities undoubtedly exist in the mind, then so must the primary qualities. Here is some of his vivid prose on this point, "all the choir of heaven and furniture of the earth, in a word all those bodies which compose the mighty frame of the world, have not any substance without a mind" (1710, ¶6). In this statement 'without' can be taken in the modern sense of 'in the absence of', or in the older sense of 'outside'.

## **Physicalism**

Physicalism is by far the most popular metaphysical position of our time. Many persons assume physicalism by default, believing it to be synonymous with science. It exists in many variants, but here are some of its most important and commonly-held theses, hugely compressed from Poland (1994):

- Everything that exists in nature is dependent upon the physical domain
- In any part of the world, the physical facts determine all the facts
- Different branches of knowledge are organised hierarchically with physics at the foundation
- Causal closure: every physical event has a physical cause

According to physicalism, at the foundational level we have physics, with particles, fields and so on, describable by highly-complex mathematical laws. Given these, and a set of initial conditions, we have a universe, the beginning of whose evolutionary history is accounted for solely in physical terms. As the universe cooled, it began to exhibit a chemistry, and stars and galaxies formed. On at least one planet, life began to evolve into ever greater complexity. Then something extraordinary happened: mind arrived in the universe. At least some creatures began to have qualitative experiences of their surroundings. Dogs can experience the colour, taste and scent of meat, hear sounds, and so on. Human beings can in addition reflect upon their experiences. According to most physicalists, mind was a recent arrival in an infinitesimal part of the universe.

As can be seen, physicalism attempts to stay close to current scientific knowledge. But physicalism is not identical to science: it relies not just on the bare facts, but on the metaphysical principles listed above. In doing so it gives a particular interpretation or spin on the way in which different scientific theories are understood and related to one another.

## **Problems of physicalism**

*A. The mind-body problem.* There is 'something it is like' for us to see a rose: we have a qualitative experience of (say) yellow. How could the spatio-temporal behaviour of systems of matter in either the rose or in the brain (regardless of their complexity) necessitate the existence of / give rise to / be identical to the 'yellowness' of the experience of seeing the rose? Similarly, how could physical goings-on in the

brain be related in any of these three ways to the pain of a migraine? (Experiential qualities such as yellowness and pain are called *qualia* (singular *quale*).

*B. What do we mean by the term 'physical'?* This is sometimes called *Hempel's Dilemma*: If we mean present day physics, then physicalism is trivially false; If we mean a (perhaps vastly different) future, completed physics then physicalism is hopelessly vague.

*C. Updating Berkeley's attack on 'matter'.* Berkeley rejected general abstract ideas, but (putting aside the controversial issue of what it means for a mathematical object to exist), an argument similar to his still goes through: How does an unobserved physical system differ from a mathematical model of it? The unobserved physical system might be a portion of the microphysical world, the very early universe, or an unobserved rock or desk. As I argue in depth elsewhere (Ells, 2011: chapter 4), physicalists have not adequately explained the distinction between an (instantiated) unobserved entity and a corresponding merely putative (uninstantiated) entity. This is fatal to physicalism because in the absence of any such distinction, any proof (or explanation) that mind necessarily arises from an unobserved physical system can be translated into a proof (or explanation) that mind must arise from the corresponding mathematical model. We can conclude that: either (i) no proof exists that mind necessarily arises, in which case mind must forever be a mystery to physicalism; or (ii) mind arises from complex mathematical systems, which is absurd.

### **Comparing metaphysical systems**

Although metaphysical systems are not empirical, we may use such criteria as the following, in combination, to help us make reasoned judgments between them:

- 1) *Scope*. This is the range and variety of facts explained by the system.
- 2) *Not denying basic data*. A metaphysical system making the claim that 'Time does not exist', for example, would have to provide solid reasons for doing so.
- 3) *Plausibility*. This should be measured from within the system itself, considered in its entirety. (In contrast to this procedure, suppose we have two rival systems A and B, where A is currently the most accepted. It is not a fair comparison to assume A provisionally, and then go on to claim that B is implausible because a particular postulate of B is incompatible with the postulates of A or their consequences.)
- 4) *The minimum number of brute facts or miracles needed*. Some minimal postulates are necessary in any metaphysical system. But once our universe is 'up and running' so to speak, then brute facts and miracles are equally undesirable. At one time, for example, the solar system was thought to be unstable, and Newton argued that God occasionally nudged the planets to correct this. Clearly this is a bad idea; but to pretend to solve the difficulty by adding 'Solar systems are stable' as an extra postulate of Newtonian physics would be equally undesirable.
- 5) *Engagement with and consistency with current science*
- 6) *Lack of 'promissory notes'*. These are assertions of the type: 'Science, in the far future, and using far different methods, will solve this problem eventually.'
- 7) *Elegance and simplicity*
- 8) *Clarity versus fudge*

It should be evident that a metaphysical system that satisfies these criteria to a greater extent than an alternative system is to be preferred to that alternative. These criteria are subjective and are not intended to be Yes/No decisions, but rather judged according to how well the criterion is met (0 = 'not at all'; 1 = 'perfectly'; 0.8 = 'quite well'; and so on). In addition, different philosophers might assign different weights to these criteria, perhaps giving greatest weight to points 2 and 5. Some might even choose a somewhat different set of criteria, but in this situation I would expect there to be a good deal of overlap.

Even though there is bound to be disagreement, these criteria provide a sufficient basis for philosophers to have fruitful dialogues in metaphysics, to improve their existing systems, and to devise wholly new and better systems. The next task is to evaluate the metaphysical positions discussed here against these criteria.

## **Evaluating Berkeley's idealism**

In my view, Berkeley scores well on points 1, 2, 6, and 7. Many people come down hard on point 3, the plausibility of his system. I believe that this is unfair, because the system, considered in its entirety, straightforwardly makes sense: it is a homogeneous world with many finite minds, and one infinite mind that plays an essential causal and unifying role. Berkeley's definition of existence is appropriate within his system.

On point 8, there is some vagueness as to whether higher animals have minds. A greater fault is at point 4, because every fact about the universe is a direct act of God's will – a miracle. I do not think that this is so bad for theists. The fatal weakness of Berkeley's idealism comes at point 5 because there is a total lack of engagement with the facts of science. Whatever these facts turn out to be, Berkeley simply asserts, in effect, "God does it that way." Berkeley's idealism also fits badly with the well-attested facts of biological and cosmic evolution: it is a very deceptive God who would plant the ideas of dinosaurs and the big bang in our minds. Berkeley, of course, knew nothing of these theories.

## **Evaluating physicalism 1: physicalist qualia realism**

Because of the problems of physicalism discussed earlier it comes in a great many varieties, but these come under two broad headings. Physicalist qualia realism, the topic of this section, accepts the reality of qualitative experiences such as yellowness and pains. It is therefore satisfactory in terms of 1) *Scope*, and 2) *Not denying basic data*. The theory is also good on points 5) *Engagement with and consistency with current science*, and 7) *Elegance and simplicity*.

Physicalist qualia realism falls down on point 3) *Plausibility*. Within this metaphysical system, ontologically grounded in a microphysics that is wholly characterized in terms of spatiotemporal behaviour, the very existence of mind is highly implausible (Problem A above). Moreover, there is no room for mental causation if the physical world is indeed causally closed.

This system has what I believe to be fatal difficulties under point 4) *Brute facts*. The emergence of qualia – late in the history of our universe, and in only an infinitesimal portion of it – is presumably owing to some complex law of (say) biology, which was latent from the big bang, but which only became patent on earth billions of years later. The very existence of such a law, even though logically possible, is a brute fact that is tantamount to a miracle. [Strawson (2006) and Ells (2011) argue, contra Clayton (2004), that the radical emergence of qualia is in no way analogous to the trivial emergence of novel spatiotemporal, behavioural properties, such as liquidity in water.] In addition, qualia realist identity theories (and these include (realist) functionalist theories) claim that the particular patterns of neural processes now happening in my brain are identical to the headache that I am experiencing at the present moment. Here we have an explanatory gap: There is no possible conceptual relationship between spatiotemporal behaviour and a feeling – no relevant proposition that could form the basis any explanation. This identity is thus a miraculous brute fact.

On point 6, physicalist qualia realism makes a massive promissory note about the future development of science. Science, throughout its history to the present day, has come to grips with the world solely objectively, in terms of measurement and verbal report. The magnificent successes of science are owing to this narrow empirical focus. But there is no apparatus that can measure consciousness directly, and no prospect of one. Moreover a feeling of pain, as experienced, is not a verbal report of pain, nor is it pain behaviour, nor is it the brain behaviour that is correlated with it. Scientists would have to discover a 'consciousness meter' before they could study qualia such as pain objectively, and it is obscure as to how this might happen, even in principle. Might pains be studied indirectly (as electrons are studied) in terms of their effects? Because the physical world is causally closed according to physicalists, this could only be done if pains were physical. But in what meaningful sense can qualitative feelings of pain be described as 'physical'? Asserting that in the future the methods of science might be expanded so as to include the subjective is to make physicalism so vague as to be vacuous. Finally, lack of clarity (point 8) is not an extra difficulty because it simply reiterates the points made here.

## Evaluating physicalism 2: physicalist qualia non-realism

Because of the severe difficulties of accounting for qualia within the physicalist framework, some physicalists adopt the position of qualia non-realism, and deny the reality of qualitative experiences such as yellowness and pains. Qualia non-realists argue in various ways: qualia simply do not exist; qualia are in some sense illusions; qualia are nothing other than physical brain states or processes; and so on.

Qualia non-realism fatally fails point 2) *Not denying basic data*. The assertion that qualia do not exist is absurd: pain is an undeniable fact of human existence, of which we all have some first-hand experience, and is not some theoretical construct that can be lopped off with Occam's razor. The same applies to other experiential qualities. It is not legitimate to deny such basic facts on the sole grounds that they cannot be easily fitted into our current metaphysical position. The idea that all experiences are somehow 'illusions' is incoherent: for what is an illusion if not an experience (albeit non-veridical)? Identifying qualia as being nothing other than physical brain states or processes effectively denies their existence. A headache, for example, is identified as a particular set of processes, utterances and behaviours in which the feeling of pain does not feature. See Strawson (2006: 5-6).

## Opinions and conclusions

According to my own assessment, using the criteria presented here, Berkeley's idealism comes out rather better than either version of physicalism. Others may judge somewhat differently, but more important is the near-certainty that all three metaphysical systems are fatally flawed:

- Berkeley's idealism fails to engage with science
- In physicalism with qualia the emergence of experiences such as pain from the behaviour of matter is tantamount to a miracle. Moreover, the theory needs a monumental promissory note asserting that physics will one day be fundamentally changed so as to be able to explain this
- Physicalism without qualia denies basic facts about our existence. The reality of pain is not to be denied on the excuse that we do not know how to fit it into our present world-view

It is all but inevitable that each person will possess a metaphysical system – and will act upon it. If we fail to research alternatives then we are liable to assume a poor position implicitly, and be reluctant to give it up. To be specific, I believe that physicalism is untenable and beyond any credible hope of correction: detailed arguments are presented in Ells (2011). We have excellent criteria for making reasoned judgements between metaphysical systems, even though they are not empirical. Many novel and under-explored positions await our investigation. One such (category of) metaphysical system is panpsychism, but there are doubtless other, and contrasting, examples. For reasons given earlier I believe our universe has a true metaphysics, and so our search will not be in vain.

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