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Breaking the Spell

Materialism and the Qualia Intuition

Abstract: *The paper consists of a simple argument in favour of reductive materialism. It is argued that the usual arguments for dualism all presuppose what I call the qualia intuition (QI), the assumption that qualia are functionally undefinable (irreducible). This assumption has given rise to a long-standing dilemma; irreducible qualia or no qualia (dualism or eliminativism). The contrary assumption, ~QI, however, gives rise to a different choice; reducible qualia or no qualia (materialism or eliminativism). The real question then is: QI (dualism) or ~QI (materialism)? It is argued that dualism and materialism, so defined, are empirically indistinguishable and hence that the choice between them must be made on pragmatic grounds. It is then argued that, pragmatically speaking, materialism is far superior to dualism and hence that we should choose the former over the latter.*

Introduction

It is widely assumed that conscious experience represents a special challenge to physical science and a serious threat to the materialist worldview which underlies it. The alleged difficulty arises because of a widespread and very powerful intuition, namely, that qualia, the phenomenal or qualitative aspects of experience, cannot be functionally defined, i.e. are irreducible.[1] I will call this the *qualia intuition* (QI). If materialism is true, then qualia must, like everything else, be

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[1] For the purposes of the argument it doesn't matter whether we identify the quale with a given functional role or with the physical (presumably neural) state occupying that role. In either case the quale would be reducible by my definition.

reducible and hence QI must be false. On the other hand, if QI is true, then qualia are irreducible and so materialism must be false. So materialism and QI are incompatible; only one can be true. In the following I will argue that QI is false, i.e. that qualia are reducible.

The Qualia Intuition

It will be noted that I have used the term 'qualia' above in a neutral sense to denote something, the phenomenal aspects of experience, which may or may not be functionally definable. To do otherwise, of course, would be to beg the question concerning the nature of qualia, one way or the other. From this perspective, then, the debate does not concern the existence of qualia, but rather their nature. Both sides agree that qualia, the phenomenal aspects of experience, exist, where they differ is over the nature of these qualia, over whether or not they can be functionally defined.

What exactly is QI? It is the belief that qualia cannot be functionally defined. What does it mean to say that qualia cannot be functionally defined? It means that qualia have a non-functional as well as a functional aspect. Any attempt, therefore, to characterize experience in purely functional terms will necessarily leave something out, namely, the non-functional aspect of qualia. According to QI, then, qualia are something over and above their functional aspects and cannot be reduced to them. There is, as Chalmers (1996) says, a 'further explanandum'. QI can be expressed in many different ways. Block's well-known distinction between access and phenomenal consciousness is a good example. He claims that there is something, phenomenal consciousness, in addition to access consciousness, i.e. that these are two very different things. While the latter can be defined in purely functional terms, he stipulates that the former cannot; it is 'distinct from any cognitive, intentional or functional property' (Block, 1995, p. 381). To assume any such distinction, as many do, between the functional and non-functional aspects of consciousness, is to be firmly in the grip of QI. We will call those who accept QI *dualists*, and those who deny it, *materialists*.

I have described QI as being widespread and very powerful. While I would hesitate to say that the intuition is universal, it is certainly felt by many people, both dualists and materialists alike. It is not that some people have QI and others have a contrary intuition; we all basically share the same intuition. Even Dennett shares QI. Speaking of the Zombic Hunch (i.e. QI) he says, 'I know the intuition well. I can feel it myself… I feel it, but I don't credit it' (Dennett, 2001, p. 1). It is not

that some philosophers have a contrary intuition; rather they reach a contrary opinion after reflection, i.e. as a conclusion, not as a starting point. So while there is certainly a difference of opinion between reductionists (materialists) and non-reductionists (dualists) with respect to qualia, the difference is not one of contrary intuitions, as is sometimes suggested. The difference rather is between those who go along with, or credit, this intuition and those who don't. QI is also very powerful, so powerful that it is difficult for many to even imagine that it might be false. Indeed, for many this intuition is non-negotiable. Our tacit acceptance of QI is important because it creates the invisible framework within which virtually all of our thinking about consciousness has taken place since the seventeenth century. QI is, as Dennett (1991) puts it, 'one of philosophy's most virulent memes'. It is also, I will argue, one of the most pernicious.

Breaking the Spell

In most philosophical discourse, because of the pervasive influence of QI, it is tacitly assumed that qualia cannot be functionally defined. Indeed this irreducibility is, for many, an essential, defining property of qualia. Now if we assume QI, then it will seem that we have only two choices, irreducible qualia or no qualia at all (dualism or eliminativism). From this perspective, the very idea of reducible qualia will seem to be a contradiction in terms. Reducible qualia are simply not an option in the logical space defined by QI. Hence it will seem that to reduce qualia would be to eliminate them, to deny consciousness. Within this framework reductive materialism would be indistinguishable from eliminativism. On the other hand, if we assume ~QI, then qualia will be reducible and none of this will be true. The choice will now be between reducible qualia and no qualia (materialism and eliminativism). From this perspective, the very idea of irreducible qualia will seem to be an oxymoron. Irreducible qualia are simply not an option in the logical space defined by ~QI. It will no longer be the case that reducing qualia would mean eliminating them. From this point of view the claim that the reduction of qualia entails their elimination is just a dualist myth. Reductive materialism would be clearly distinguishable from eliminativism; the former recognizes phenomenality, the latter does not. We can express the difference between the two positions as follows. QI represents what Guzeldere (1997) calls a *segregationist* intuition, i.e. one which says that nothing can be both phenomenal and functional; whereas ~QI represents an *integrationist*

intuition, i.e. one that says nothing can be phenomenal without also being functional.

The fact that dualists and materialists have contrary starting assumptions, namely QI and ~QI, respectively, means that arguments between them have, over the years, amounted to little more than exercises in table-thumping and question-begging. It is as pointless for the dualist to object of the materialist that he leaves out qualia as it is for the materialist to object of the dualist that his qualia are imaginary. In both cases the real, underlying question is being begged, *viz.* are qualia reducible are not. The dualist assumes no (QI), the materialist assumes yes (~QI). To move forward, then, obviously requires a non-question-begging argument; one which assumes neither QI nor ~QI. I will present such an argument shortly, but first there are a couple of other matters I want to discuss.

Now some may wonder about my calling the belief that qualia are not functionally definable an 'intuition'. What about all the standard arguments for dualism, beginning with Descartes all the way up to the present? A close examination of these reveals that they are not really *arguments* for QI, since they all presuppose QI in one form or another. Chalmers (2002) provides a useful schematization of the three principal dualist arguments. QI is presupposed in each of them. It is presupposed by premise 2 of the explanatory argument, 'Explaining structure and function does not suffice to explain consciousness'; by premise 1 in the zombie argument, 'It is conceivable that there be zombies'; and by premise 2 in the knowledge argument, 'Mary does not know all the facts'. So the usual purported arguments for dualism are not really independent arguments for QI at all, since they all presuppose it in one form or another and therefore beg the question. They are better seen as 'intuition pumps', to use Dennett's phrase, rather than genuine arguments. Their purpose is to elicit or evoke QI, not to demonstrate its truth. The difficulties with dualist arguments do not end with their use of crucial question-begging premises. There is also the common leap they all make from epistemic premises to an ontological conclusion, a move which many find exceedingly problematic. Nevertheless, despite these serious shortcomings, these arguments continue to be popular and influential because their conclusions are in accord with our intuitions. As Loar says, 'This intuition is so compelling that it is tempting to regard anti-physicalist arguments as rationalizations of an intuition whose independent force masks their tendentiousness' (Loar, 1997, p. 598). The survival and popularity of

these 'arguments' is a testament to the power of QI, but they do nothing to establish its truth.[2]

So, in the end, all we have is an intuition, a gut feeling, albeit a very widespread and powerful one. The fact that, at bottom, we are just dealing with an intuition is admitted by most dualists. Chalmers, for example, says, 'Throughout this book, I have *assumed* that consciousness exists, and that to redefine the problem as that of explaining how certain cognitive or behavioural functions are performed is unacceptable. That is what I mean by taking consciousness seriously' (Chalmers, 1996, p. xii, italics added). Similarly, Block merely stipulates that phenomenal consciousness is distinct from access consciousness; he does not argue for it. This intuition is the only "reason" we have for believing that qualia cannot be functionally defined and hence for thinking that qualia pose a special challenge to science or a serious threat to materialism. We cannot move forward without denying QI and yet, because it is so strong, QI seems undeniable. That is our dilemma — or so it seems. Levine puts the matter as follows:

> There is only one way in the end that I can see to escape this dilemma and remain a materialist. One must either deny, or dissolve, the intuition that lies at the foundation of the argument. This would involve, I believe, taking more of an eliminativist line with respect to qualia than many materialist philosophers are prepared to take. As I said earlier, this kind of intuition about our qualitative experience seems surprisingly resistant to philosophical attempts to eliminate it. As long as it remains, the mind/body problem will remain. (Levine, 1983, p. 361)

One can see the influence of QI here when Levine expresses the fear that reducing qualia would amount to eliminating them. Like all dualists, he misunderstands what the materialist is saying because, within his conceptual framework, he cannot distinguish materialism from eliminativism. Being under the spell of QI, Levine thinks that our dilemma is that we must choose between dualism and eliminativism (irreducible qualia or no qualia). But I am claiming that the real choice, and it is not a dilemma, is between dualism and materialism (irreducible qualia or reducible qualia).

[2] One of the referees asked how this claim relates to the distinction between intrinsic and extrinsic properties; specifically, whether or not it would be question-begging to assume that intrinsic properties are distinct from extrinsic properties. The answer, I believe, is yes. I think that this is already implicit in the rejection of the explanatory argument. But more explicitly, and speaking in terms of categorical rather than intrinsic properties, one could argue that QI is really just a special case of a more general intuition, the categorical basis intuition (CBI), i.e. the belief that dispositional properties require a categorical basis. Rejecting this more general intuition would eliminate the last bastion of dualism, the distinction between categorical and dispositional properties, and lead to some interesting metaphysics.

What our earlier discussion makes clear is that the standard, principal objection to materialism — namely, that to reduce qualia is to deny them — cannot be sustained. It is either question-begging or false, depending on one's prior assumptions, i.e. on whether one assumes QI or ~QI. The objection is true only if we assume QI. But if we assume QI then we are begging the question and so the objection fails. On the other hand, if we assume ~QI, then it is false that reduction entails elimination and the objection again fails. The claim that the materialist denies the obvious, the existence of qualia, is just dualist propaganda. The materialist is not denying the phenomenal aspects of experience, he is claiming that those aspects are functionally definable, i.e. reducible. Materialism, properly understood, therefore, is to be clearly distinguished from eliminativism. Eliminativism denies phenomenality, materialism, like dualism, affirms it. Dualism and materialism differ only on whether or not qualia are reducible, not on whether or not qualia exist. They differ, therefore, on what kind of theory a theory of consciousness should be, on what kind of a theory we should expect. Under QI (dualism) reductive theories of consciousness will be seen as inadequate and a non-reductive theory sought. Under ~QI (materialism) a reductive theory will be seen as adequate and a non-reductive theory unnecessary.

QI or ~QI?

How, then, do we decide between these two alternatives, between dualism (QI) and materialism (~QI)? On what basis? Because materialism and dualism both affirm the existence of qualia, they are what we might call empirically indistinguishable (equivalent). In other words, there is no *empirical* difference between the two positions; they are equally consistent with experience, so experience cannot decide between them. The choice between them, therefore, must be made on non-empirical, i.e. pragmatic, grounds.

If we look at the pragmatic consequences of assuming first QI and then ~QI, it becomes immediately apparent that it is no contest; the consequences of assuming ~QI are clearly preferable to the consequences of assuming QI. I will distinguish three different types of pragmatic consequence. Firstly, assuming QI means introducing irreducible qualia into our hitherto exclusively reducible ontology, i.e. to some kind of dualism, by definition. Secondly, dualism brings with it infamously intractable problems concerning exactly what these irreducible qualia are, and their relationship to the physical world, i.e. the classical mind/body problem. On this question, even after almost 400

years, nobody has a clue. It is fair to say, then, that assuming QI leads to a worldview that, so far at least, is literally incomprehensible to us. Moreover, dualism also seems to lead to epiphenomenalism, which is of course a highly counter-intuitive position. These sorts of problems involving the relationship between the irreducible and reducible aspects of the world we will refer to as *philosophical* problems. And thirdly, assuming QI runs contrary to the tide of history, to 400 years of successful, reductive explanation based on materialist assumptions. In other words, QI is inconsistent with the scientific worldview as we understand it. It implies that science is incapable, in principle, of explaining consciousness, and hence that moving forward will require a kind of second scientific revolution of which we, at present, have no inkling. We will require some kind of non-reductive theory and, since we have no idea what that is, the assumption of QI has led to a centuries-long impasse.

On the other hand, assuming ~QI means, firstly, that we remain materialists, and hence, monists. Since qualia are reducible they are already present in our physical ontology; they don't have to be brought in from outside. They are made of the same basic stuff and obey the same basic laws as everything else in the universe. The world is one, unified, comprehensible whole. Secondly, there are no philosophical problems of the sort associated with dualism — no problems, in general, understanding what qualia are or how they fit into the physical world, no mind/body problem, no problems with epiphenomenalism. Thirdly, assuming ~QI is consistent with the scientific worldview and hence in accord with the tide of history. It implies that science, as we understand it, is entirely capable of dealing with consciousness in the same reductive manner it has dealt with everything else. Moving forward under ~QI does not require a conceptual revolution of which we can only dream, rather we are looking for a reductive theory of the kind which is characteristic of science. So assuming ~QI does not lead to an impasse, but rather to business as usual as far as the search for a scientific theory of consciousness is concerned.

We can summarize these consequences by saying that assuming QI leads to some kind of dualism, apparently intractable philosophical problems, and is inconsistent with the scientific worldview. Assuming ~QI leads to a materialistic monism, an absence of philosophical problems, and is consistent with the scientific worldview. This, I think, fairly summarizes the situation. It is sometimes thought that it is only materialists who have difficulty reconciling their position with common sense. But, as mentioned above, assuming QI, while intuitive in itself, leads to a conflict with other basic intuitions, e.g. the intuition

that conscious states have causal powers. Both materialism and dualism, then, lead to conflicts with intuition, either directly or indirectly, so the dualist has no particular advantage over the materialist in this regard. It would seem then, objectively speaking, that assuming ~QI is clearly preferable on pragmatic grounds to assuming QI. It leads to a monism which is preferable to a dualism, everything else being equal, for reasons of parsi- mony. It leads to conceptual clarity and an absence of the philosophical problems which plague dualism. And finally, assuming ~QI does not lead to an impasse, but to business as usual as far as the search for a scientific theory of consciousness is concerned.

Conclusion

If, as I have argued, we must choose between dualism and materialism based solely on pragmatic grounds, then it is clear that materialism is the obvious choice for the three reasons given. This means that we regard ~QI (materialism) as true and QI (dualism) as false, even though they are, in fact, empirically equivalent. An analogy may be helpful in making the structure of the argument clear. Imagine we have two astronomical theories, one geocentric, the other heliocentric, each of which accurately predicts the positions of the planets. The former, however, is very complicated and *ad hoc*, while the latter is very simple and elegant. Now, even though these two theories are, we are supposing, empirically indistinguishable, we would, in accordance with the usual scientific canons of parsimony and elegance, naturally choose the latter over the former. The heliocentric theory, which we have chosen on pragmatic grounds, we would then refer to as true and the geocentric theory as false, despite the fact that they are empirically equivalent. Similarly, I am arguing that reductive and non-reductive theories of consciousness are both logically possible and would necessarily be empirically indistinguishable. However, because they differ so fundamentally on a pragmatic level, we are justified by the usual canons of scientific methodology in choosing the former over the latter, and hence in saying that ~QI (materialism) is true and QI (dualism) false. What makes this conclusion possible is the realization that materialism, properly understood, is distinct from eliminativism, i.e. that the reduction of qualia does not entail their elimination, and hence that materialism and dualism are, contrary to popular belief, empirically indistinguishable.[3]

[3] I would like to thank the two referees and David Chalmers for their comments on the penultimate draft.

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