

EPIPHENOMENAL QUALIA

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It is undeniable that the physical, chemical and biological sciences have provided a great deal of information about the world we live in and about ourselves. I will use the label 'physical information' for this kind of information, and also for information that automatically comes along with it. For example, if a medical scientist tells me enough about the processes that go on in my nervous system, and about how they relate to happenings in the world around me, to what has happened in the past and is likely to happen in the future, to what happens to other similar and dissimilar organisms, and the like, he or she tells me — if I am clever enough to fit it together appropriately — about what is often called the functional role of those states in me (and in organisms in general in similar cases). This information, and its kin, I also label 'physical'.

I do not mean these sketchy remarks to constitute a definition of 'physical information', and of the correlative notions of physical property, process, and so on, but to indicate what I have in mind here. It is well known that there are problems with giving a precise definition of these notions, and so of the thesis of Physicalism that all (correct) information is physical information.¹ But — unlike some — I take the question of definition to cut across the central problems I want to discuss in this paper.

I am what is sometimes known as a "qualia freak". I think that there are certain features of the bodily sensations especially, but also of certain perceptual experiences, which no amount of purely physical information includes. Tell me everything physical there is to tell about what is going on in a living brain, the kind of states, their functional role, their relation to what goes on at other times and in other brains, and so on and so forth, and be I as clever as can be in fitting it all together, you won't have told me about the hurtfulness of pains, the itchiness of itches, pangs of jealousy, or about the characteristic experience of tasting a lemon, smelling a rose, hearing a loud noise or seeing the sky.

There are many qualia freaks, and some of them say that their rejection of Physicalism is an unargued intuition.² I think that they are being unfair to themselves. They have the following argument. Nothing you could tell of a physical sort captures the smell of a rose, for instance. Therefore, Physicalism is false. By our lights this is a perfectly good argument. It is

¹See, e.g., D. H. Mellor, "Materialism and Phenomenal Qualities", *Aristotelian Society Supp.* Vol. 47 (1973), 107-19; and J. W. Cornman, *Materialism and Sensations* (New Haven and London, 1971).

²Particularly in discussion, but see, e.g., Keith Campbell, *Metaphysics* (Belmont, 1976), p. 67.

obviously not to the point to question its validity, and the premise is intuitively obviously true both to them and to me.

I must, however, admit that it is weak from a polemical point of view. There are, unfortunately for us, many who do not find the premise intuitively obvious. The task then is to present an argument whose premises are obvious to all, or at least to as many as possible. This I try to do in §I with what I will call "the Knowledge argument". In §II I contrast the Knowledge argument with the Modal argument and in §III with the "What is it like to be" argument. In §IV I tackle the question of the causal role of qualia. The major factor in stopping people from admitting qualia is the belief that they would have to be given a causal role with respect to the physical world and especially the brain;³ and it is hard to do this without sounding like someone who believes in fairies. I seek in §IV to turn this objection by arguing that the view that qualia are epiphenomenal is a perfectly possible one.

I. THE KNOWLEDGE ARGUMENT FOR QUALIA

People vary considerably in their ability to discriminate colours. Suppose that in an experiment to catalogue this variation Fred is discovered. Fred has better colour vision than anyone else on record; he makes every discrimination that anyone has ever made, and moreover he makes one that we cannot even begin to make. Show him a batch of ripe tomatoes and he sorts them into two roughly equal groups and does so with complete consistency. That is, if you blindfold him, shuffle the tomatoes up, and then remove the blindfold and ask him to sort them out again, he sorts them into exactly the same two groups.

We ask Fred how he does it. He explains that all ripe tomatoes do not look the same colour to him, and in fact that this is true of a great many objects that we classify together as red. He sees two colours where we see one, and he has in consequence developed for his own use two words 'red₁' and 'red₂' to mark the difference. Perhaps he tells us that he has often tried to teach the difference between red₁ and red₂ to his friends but has got nowhere and has concluded that the rest of the world is red₁-red₂ colour-blind — or perhaps he has had partial success with his children, it doesn't matter. In any case he explains to us that it would be quite wrong to think that because 'red' appears in both 'red₁' and 'red₂' that the two colours are shades of the one colour. He only uses the common term 'red' to fit more easily into our restricted usage. To him red₁ and red₂ are as different from each other and all the other colours as yellow is from blue. And his discriminatory behaviour bears this out: he sorts red₁ from red₂ tomatoes with the greatest of ease in a wide variety of viewing circumstances. Moreover, an investigation of the physiological basis of Fred's exceptional ability reveals that Fred's optical system is able to separate out two groups of wave-

³See, e.g., D. C. Dennett, "Current Issues in the Philosophy of Mind", *American Philosophical Quarterly*, 15 (1978), 249-61.

lengths in the red spectrum as sharply as we are able to sort out yellow from blue.⁴

I think that we should admit that Fred can see, really see, at least one more colour than we can; red_1 is a different colour from red_2 . We are to Fred as a totally red-green colour-blind person is to us. H. G. Wells' story "The Country of the Blind" is about a sighted person in a totally blind community.⁵ This person never manages to convince them that he can see, that he has an extra sense. They ridicule this sense as quite inconceivable, and treat his capacity to avoid falling into ditches, to win fights and so on as precisely that capacity and nothing more. We would be making their mistake if we refused to allow that Fred can see one more colour than we can.

What kind of experience does Fred have when he sees red_1 and red_2 ? What is the new colour or colours like? We would dearly like to know but do not; and it seems that no amount of physical information about Fred's brain and optical system tells us. We find out perhaps that Fred's cones respond differentially to certain light waves in the red section of the spectrum that make no difference to ours (or perhaps he has an extra cone) and that this leads in Fred to a wider range of those brain states responsible for visual discriminatory behaviour. But none of this tells us what we really want to know about his colour experience. There is something about it we don't know. But we know, we may suppose, everything about Fred's body, his behaviour and dispositions to behaviour and about his internal physiology, and everything about his history and relation to others that can be given in physical accounts of persons. We have all the physical information. Therefore, knowing all this is *not* knowing everything about Fred. It follows that Physicalism leaves something out.

To reinforce this conclusion, imagine that as a result of our investigations into the internal workings of Fred we find out how to make everyone's physiology like Fred's in the relevant respects; or perhaps Fred donates his body to science and on his death we are able to transplant his optical system into someone else — again the fine detail doesn't matter. The important point is that such a happening would create enormous interest. People would say, "At last we will know what it is like to see the extra colour, at last we will know how Fred has differed from us in the way he has struggled to tell us about for so long". Then it cannot be that we knew all along all about Fred. But *ex hypothesi* we did know all along everything about Fred that features in the physicalist scheme; hence the physicalist scheme leaves something out.

Put it this way. *After* the operation, we will know *more* about Fred and especially about his colour experiences. But beforehand we had all the physical information we could desire about his body and brain, and indeed

⁴Put this, and similar simplifications below, in terms of Land's theory if you prefer. See, e.g., Edwin H. Land, "Experiments in Color Vision", *Scientific American*, 200 (5 May 1959), 84-99.

⁵H. G. Wells, *The Country of the Blind and Other Stories* (London, n.d.).

everything that has ever featured in physicalist accounts of mind and consciousness. Hence there is more to know than all that. Hence Physicalism is incomplete.

Fred and the new colour(s) are of course essentially rhetorical devices. The same point can be made with normal people and familiar colours. Mary is a brilliant scientist who is, for whatever reason, forced to investigate the world from a black and white room *via* a black and white television monitor. She specialises in the neurophysiology of vision and acquires, let us suppose, all the physical information there is to obtain about what goes on when we see ripe tomatoes, or the sky, and use terms like 'red', 'blue', and so on. She discovers, for example, just which wave-length combinations from the sky stimulate the retina, and exactly how this produces *via* the central nervous system the contraction of the vocal chords and expulsion of air from the lungs that results in the uttering of the sentence 'The sky is blue'. (It can hardly be denied that it is in principle possible to obtain all this physical information from black and white television, otherwise the Open University would *of necessity* need to use colour television.)

What will happen when Mary is released from her black and white room or is given a colour television monitor? Will she *learn* anything or not? It seems just obvious that she will learn something about the world and our visual experience of it. But then it is inescapable that her previous knowledge was incomplete. But she had *all* the physical information. *Ergo* there is more to have than that, and Physicalism is false.

Clearly the same style of Knowledge argument could be deployed for taste, hearing, the bodily sensations and generally speaking for the various mental states which are said to have (as it is variously put) raw feels, phenomenal features or qualia. The conclusion in each case is that the qualia are left out of the physicalist story. And the polemical strength of the Knowledge argument is that it is so hard to deny the central claim that one can have all the physical information without having all the information there is to have.

~~II. THE MODAL ARGUMENT~~

~~By the Modal Argument I mean an argument of the following style.⁶ Sceptics about other minds are not making a mistake in deductive logic, whatever else may be wrong with their position. No amount of physical information about another *logically entails* that he or she is conscious or feels anything at all. Consequently there is a possible world with organisms exactly like us in every physical respect (and remember that includes functional states, physical history, *et al.*) but which differ from us profoundly in that they have no conscious mental life at all. But then what is it that we have and they lack? Not anything physical *ex hypothesi*. In all physical~~

⁶See, e.g., Keith Campbell, *Body and Mind* (New York, 1970); and Robert Kirk, "Sentience and Behaviour", *Mind*, 83 (1974), 43-60.