WHAT IT'S LIKE AND WHAT'S REALLY WRONG WITH PHYSICALISM: A WITTGENSTEINEAN PERSPECTIVE

A.J. Rudd, Dept. of Philosophy, Bristol University, Bristol BS8 1TB, UK.

Abstract: It is often argued that the existence of qualia — private mental objects — shows that physicalism is false. In this paper, I argue that to think in terms of qualia is a misleading way to develop what is in itself a valid intuition about the inability of physicalism to do justice to our conscious experience. I consider arguments by Dennett and Wittgenstein which indicate what is wrong with the notion of qualia, but which by so doing, help us to locate the real problem for physicalism. This is not that there may be mental as well as physical objects of which we are aware, but that the very notion of awareness is itself resistant to physicalist treatment. In the concluding sections, I draw on Wittgenstein's positive account of sensations, to suggest a way in which the apparent chasm separating objective and subjective viewpoints might be bridged in a non-reductive fashion.

There is a familiar argument, or family of arguments, which is used against physicalism. The essential line of thought is that, even if we gave an ideally complete physical description of a living human being — whether on the levels of overt behaviour, of neurophysiology or of abstract functional organisation — we would still have left something out; that person's subjective conscious experience, what it was like to be that person. The physical description doesn't include this — it doesn't even logically imply it. But since it is nonetheless real, we have to conclude that all the physical facts are not all the facts there are.¹ Call this the 'What it's Like' argument.

There is something intuitively compelling about this argument. Yet it has, or seems to have, some strange and unwelcome consequences. Consciousness, according to this argument, is what is left over when all the physical/functional facts are in. But this seems to make it an oddly marginal phenomenon. If consciousness is separated in this way from everything that is publicly observable, then we seem to be pushed towards scepticism about other minds, and to epiphenomenalism. Moreover, Wittgenstein and others have provided strong arguments against the idea of consciousness as a realm of private inner states, arguments which suggest that states of consciousness cannot be detached from public, observable behaviour in this way.

And yet, there still seems to be something right about the argument; to say there is nothing left out when all the physical facts are in does just seem to ignore our inner lives, our subjectivity. But can we defend consciousness against radical materialism without, by our very defence, trivialising it, reducing it to 'epiphenomenal qualia' which hover over a physical system which is complete in itself, and which can be fully described without implying anything about them? In this paper I shall attempt to show that Wittgensteinean criticisms of qualia, though justified, do nothing to advance the case for physicalism. A version of the 'What it's Like' argument can be advanced which makes no reference to qualia. Indeed,

seeing what is wrong with the notion of qualia enables us to understand properly how sensations are connected to bodily behaviour, and this in turn enables us to understand more adequately just what is wrong with physicalism. On the Wittgensteinean perspective which I shall be defending here, physicalism in fact turns out to be much more radically mistaken than even most of its adversaries have supposed.

Ι

The first thing it is important to be clear about is that the 'What it's Like' argument does not depend on a belief in *qualia*; that is, in private, inner mental objects. All too often, attempts to turn the anti-physicalist intuition into a precise argument seek to show that it is qualia in this sense that the physicalist leaves out of his account.² But qualia are, to say the least, controversial entities; to make the issue between physicalists and their opponents hinge on the reality or otherwise of qualia is to make things altogether too easy for the physicalist.

We can see this by looking at Dennett's essay 'Quining qualia' (Dennett, 1990: following page references in the text are to this paper), which is an attempt to use arguments against qualia in order to discredit the anti-physicalist intuition generally. It is important for my purposes to show why this does not work. Dennett starts off by emphasizing how absurd it would seem to deny qualia, considering that they 'could not be more familiar to each of us: the *ways things seem to us*' (p. 519). That there is this subjectivity seems to form 'a bulwark against creeping mechanism' (p. 524). So he recognizes the intuition that there really is a way things seem to us, and that this cannot be fitted into any physicalist perspective. He then attempts to undermine this intuition. How? By arguing against the notion that there are qualia, defined as 'properties of a subject's mental states that are (1) ineffable, (2) intrinsic, (3) private, (4) directly or immediately apprehensible in consciousness' (p. 523).

I am generally sympathetic to the arguments that Dennett brings against this conception of qualia, but they do not have the significance that he ascribes to them. For instance, he develops a series of thought-experiments, designed to make us accept that a *quale* does not have intrinsic properties, which are either there or not, independently of how we interpret them. He considers two coffee tasters, one of whom thinks that his taste has improved over the years, so that, while the coffee still tastes the same, he no longer likes it. The other taster thinks that his taste buds have deteriorated, so that the coffee no longer tastes to him as it once did, but he thinks that if it did, he would enjoy that taste as much as ever (pp. 526–33) Dennett asks us to consider whether we should say that either taster's qualia have changed their intrinsic qualities, or whether they have just changed their attitude to the same qualia. He suggests that the question is meaningless, that we cannot separate out the qualia in this way.

I think he is right, but this is just the old Kantian point that 'intuitions without concepts are blind' (Kant, 1933, A51/B75) — even when they are intuitions of 'inner sense'. We cannot, quite generally, separate off the purely 'given', the bare sensory material, from our conceptualisations and interpretations of it. But of course, this does not mean that we can simply do without the sensory material, even if we cannot factor it out from our attitudes to it. As Kant went on to say, 'thoughts without content are

empty' (*ibid*.). To believe in qualia as Dennett defines them is to suppose that a sensation has a character of its own, which is what it is quite independently of and apart from our attitude to it, our interpretations of it. But to think in this way is to think of sensations as mind-independent objects. And a little reflection ought to show that this is surely a fairly bizarre way to think about sensations. The reality of a sensation *is* exhausted by its appearance to us; for sensations, *esse* is *percipi*.

Ironically enough, Dennett's argument against qualia, far from establishing physicalism, actually demonstrates why it is that physicalism cannot give an adequate account of consciousness. For the believer in qualia as Dennett characterizes them goes wrong, not by resisting physicalism too strenuously, but by making too many concessions to it. To think in terms of qualia, inner mental *objects*, is to objectivize the subjective, to treat it as though it were a realm of mind-independent objects. The real objection to physicalism is that we have the experience, e.g. of tasting coffee, not that we are supposedly able to factor out what is intrinsic about the coffee-taste-*quale*. This is why physicalists like to see the debate proceeding as one about qualia; since they are supposed by their defenders to be quasi-objective *things*, it might seem that there was some prospect of showing that they were really *physical things*. Thus Paul Churchland argues that qualia do exist, but what they turn out to be are brain states. (Or, more accurately, what we confusedly thought of as qualia, we can come to understand properly as brain states. See Churchland, 1985).

Dennett too supposes that if consciousness were anything real it would have to be somehow objective. In *Consciousness Explained* (1991), he claims that, *'There seems to be phenomenology*. . . But it does not follow from this undeniable, universally attested fact that there really is phenomenology. This is the crux.' (p. 366.) It is also, however, nonsense. Phenomenology just *is* the way things seem to us, so there is no room for an appearance/reality distinction here. Like many other physicalists, Dennett wants to say that there aren't really, in the last analysis, any conscious states; consciousness is just the way in which the functioning of our brain states appears to us. But this does not succeed in reducing, eliminating or debunking consciousness. The anti-physicalist claim is not (or should not be) that there are 'mental objects' the intrinsic properties of which we perceive in an accurate and undistorted way; rather, what physicalism seems unable to handle is simply the fact that we are beings to whom things appear at all, whatever they may be and whether in a distorted or undistorted way. To say that there seems to be consciousness but there isn't really, presupposes that if 'consciousness' were to designate anything really real, it would have to be some mind-independent entity, one for which the distinction between reality and appearance could be made. But this is a confusion. If there seems to be consciousness, then there is consciousness, and it is the reality of this seeming that presents the challenge to physicalism.³

Π

That sensations are not things, and that materialist attempts to reduce them to physical things must therefore fail, was precisely the point that Wittgenstein was trying to make in his frequently misunderstood Private Language Argument (Wittgenstein, 1958, ## 243 ff.). In essence, Wittgenstein's argument is that the notion of a private object collapses as incoherent. If something is an object, there must be criteria for us to recognize it as the same object we observed on a previous occasion. But, so

Wittgenstein argues, if I am simply contemplating my sensations in solipsistic isolation, I can produce no such non-arbitrary criteria for reidentification. It may seem to me that the sensation I am having now is the same as the one that I was having an hour ago. But if I have nothing further, beyond my own subjective feelings, to go on, then, 'whatever is going to seem right to me is right. And that only means that here we can't talk about "right".' (*ibid.*, # 258.)

This does not mean that Wittgenstein is — absurdly — denying that I can correctly judge that, for instance, the wine I am drinking now is more full-bodied than the one I tasted before; or that I can tell an occulist who is giving me an eye-test that I can see the letters more clearly through these lenses than through the ones I was trying previously. All he is denying is that I could establish a language for my subjective sensations from scratch by considering them in isolation from the social and physical context in which I do actually experience them. I am not aiming to give a full exposition or assessment of the Private Language Argument here. But it is important to see that it functions as a *reductio ad absurdum*.

In fact, there are two main stages to Wittgenstein's argument, both of which involve a *reductio*. The target of both stages is the idea that we acquire our language for our inner states from concentrating on them in isolation from behaviour, social context etc. The first stage⁴ attempts, as briefly indicated above, to show that I couldn't develop a language for my own inner states in that way; the second (*ibid.*, ## 281 ff.) that even if I could, I wouldn't be able to apply it to others. If I were able to attach a meaning to 'pain' as 'a state like the one which I am feeling now', how could it even be intelligible that *you* could feel that?⁵ To use Wittgenstein's analogy of the beetle in the box, if by 'beetle' each of us means simply 'whatever is in my box, which only I can see', then how could any of us know what any of the others meant when they talked about their beetles? (*ibid.*, # 293.)

However, the tendency to reify sensations, to think of them as objects, is so strong that when Wittgenstein protests against this assimilation, he is taken to be denying the reality of sensations (regarded as conscious episodes, not just in physiological/ functional terms). Now this is precisely what Dennett does want to do. But where Wittgenstein differs from him is that he does not suppose that this attack on the philosophical notion of qualia in any way undermines our ordinary conviction that we are conscious, that there is more to us than can be recognised from the third-personal stance of the scientific observer. The version of this 'scientific', third-personal approach that Wittgenstein considered was behaviourism, but the greater scientific sophistication of the functionalist physicalism that Dennett espouses does not affect the philosophical issues. In the *Investigations*, Wittgenstein gives us this little dialogue between himself and his imagined interlocutor:

'But you will surely admit that there is a difference between pain-behaviour accompanied by pain and painbehaviour without any pain?' — Admit it? What greater difference could there be? — 'And yet you again and again reach the conclusion that the sensation itself is a *nothing*.' — Not at all. It is not a *something*, but not a *nothing* either! (# 304.)

A sensation is not a thing (a mind-independent object like a pebble or a tree, which has its own intrinsic, inherent properties, independently of what we think about it); but that does not mean that it is just nothing (has no reality). A sensation is a sensation, and to understand what that is will involve, not

trying to assimilate sensation-language to other sorts of language (thing-language) but rather, paying careful attention to the way that sensation-language itself operates, how we do talk about sensations.

III

If sensations were things (as the advocates of qualia think) it might be plausible to suppose that they were really physical things. But sensations are not things (though they are not just nothings either) and it is precisely this lack of substantiality that renders them immune from physicalist reduction. This point can, I hope, be further clarified by considering Jackson's classic argument, which, I shall claim, develops the anti-physicalist intuition in a seriously misleading way. He imagines Mary, a brilliant physiologist, confined from birth to an entirely black and white environment, within which she learns all there is to know about the physiology of colour perception. But she still doesn't know what it is like to see colours, and she only comes to know this when she is released into the outside world. But that means that, since she knew all the physical facts about colour perception before her release, there are more things to know than just the physical facts. Since she has learnt something new '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.' (Jackson, 1982, as reprinted in Lycan, 1990, p. 471.)

The crucial premise here is that Mary will learn a new fact on her release, i.e. what a red *quale* is like. The standard physicalist response to the argument has been to deny that she will learn a new fact. Instead, it is suggested that what she will acquire is a new ability, rather than any new knowledge (cf. Levin, 1990; Lewis, 1990); or that she will simply gain a new mode of access to facts that she knew already (cf. Churchland, 1985; Tye, 1986). What had seemed an intuitively clear argument thus peters out into a rather bemusing technical controversy as to how we should individuate facts (see Van Gulick, 1993, pp. 138–42. Does she really come to know a new *fact*, or just learn more, or in a different way, about an old fact?). But really, the question of whether Mary acquires new information is something of a red herring. Both Jackson and his critics take for granted that the dispute is about what entities there are in the world. Are there, in addition to the physical objects of which we are aware, also mental objects? But by putting it in this way, Jackson has missed the intuitive force of his own example.

For the sake of argument, let us adopt naive realism. Let's say that what Mary first becomes aware of on her release is neither a red *quale*, nor her brain state to which she gains access in a new way. Let's say that what she becomes aware of is a bright red tulip. Now a tulip is surely a physical thing. The crucial point though, is that her awareness of it is not something physical. Jackson's physicalist critics, oddly enough, have tended to take for granted their entitlement to use notions such as awareness, introspection, sensory acquaintance. But the fundamental problem for physicalism is not that some of the objects of experience may be non-physical, but that the notion of experience itself is not a physical one. To say that Mary now knows by acquaintance what she previously knew by description may be right; but the problem is precisely to give a physicalist account of acquaintance.⁶ When I am aware of an uncontroversially physical object like a table, my *awareness* still isn't anything physical. One can deny 'mental objects', qualia or whatever, or remain agnostic about them, but this does nothing to help the physicalist. What the physicalist has to show is that my consciousness, my awareness — whether of

tables or colours, after-images or mountains — is something physical.

Of course, physicalist accounts of consciousness have been attempted; they construe it in functional/ behavioural terms as a disposition to respond to the features of one's environment in a systematic way; one that can be described abstractly in computational terms and which is realised in neurophysiological structures. But this is where the 'What it's Like' argument really comes into play, for there clearly *is* more to it than that. However detailed the account of neuronal firings, information processing or overt bodily movements, it does not fully capture what goes on when someone is struck, say, by the light sparkling off a swift flowing river, or is moved by a sudden catch of melody heard through a half-open door, or is overwhelmed by grief or joy, or feels a stab of pain as she hits her head on a low door frame. To describe people just as complex functionally organised physical systems does not give a complete or adequate account of them; for it makes no mention of what it is like to be those people.

The failure of reductive accounts of consciousness to do justice to the phenomenology of conscious experience needn't encourage the friends of qualia, for their postulation does not help us much in that respect. I am moved by the melody or struck by the colour of the tulip — not by mythologised private objects. (Nor is it very plausible to postulate a 'grief-quale'.) These considerations suggest that it is in fact Nagel, rather than Jackson, who makes the essential point most clearly. What is crucial is the issue of what it is like, not that of what is known. And it seems undeniable that a knowledge of the workings of a physical system does not tell us what — if anything — it is like to *be* that system. (Unless we cheat and try to use our knowledge of what it is like to be the physical structures that we are as the basis for reasoning by analogy.)

To put the point in terms of Jackson's example. Suppose Mary is doing a scan of the brain activity of a subject. It is not that her scan misses certain private objects — qualia — that are only accessible to the subject. The point is far more radical than that. It is that, just from the knowledge she has of him as a complex physical system, she has no reason to suppose that he has consciousness at all. It is only because we already know that we are conscious subjects (How? I shall come back to that later) that we can start to work out that there are connections between our conscious experience and neural events. But if we just considered the neural workings by themselves, in abstraction from everything else we know — or if we imagine aliens doing the brain scans — there would be nothing about this physical/functional information that would even start to give us so much as the idea that the creatures with these inner workings were conscious.

IV

Seeing what is wrong with the idea of qualia enables us to see the real force of the argument against physicalism. But if sensations are neither private objects with which we are acquainted in pure introspection, nor reducible to the observable purely objective entities of natural science, what are they? For the mainstream of contemporary philosophy of mind, these two options are exhaustive. As David Chalmers puts it:

Our grounds for belief in consciousness derive solely from our own experience of it. Even if we knew every last detail about the physics of the Universe . . . *that* information would not lead us to postulate the reality of conscious experience (Chalmers, 1996, p. 101).

Here we have the dichotomy between third-personal, objective science ('the physics of the universe') and first-personal subjective consciousness. No wonder we find it hard to put the two together. What I want to suggest is that we can look back to Wittgenstein for a way out of this impasse. Wittgenstein attempts to dissolve the classic problems of mind and body and of our knowledge of other minds, by starting, not from the first or the third but from the *second* person. That is, neither from the introspection of the isolated subject, nor from the objectivity of scientific observation, but from ordinary human interaction.

In his positive account of how our language for inner states works, Wittgenstein was not attempting to create a theory, but to remind us of some very obvious facts that we are all well aware of in everyday life, but which we seem to lose our grasp of when we start to theorise. Having demolished the theory of private ostensive definition by showing that it would actually render impossible what it seeks to explain, Wittgenstein follows his injunction, 'Don't think, look!' by pointing us to the way in which we do actually learn the language in which we talk about inner states — our own and other people's:

Words are connected with the primitive, the natural expression of the sensation, and used in their place. A child has hurt himself and he cries; and then adults talk to him and teach him exclamations and later, sentences. They teach the child new pain behaviour (Wittgenstein, 1958, # 244).

We are able to learn our language for inner states because we experience them, not as dissociated from behaviour, but as finding a natural expression in it. This is crucial for Wittgenstein, and we need to be careful to avoid misunderstanding his point. Wittgenstein does not mean that we start by identifying behaviour in non-mentalistic terms, and then learn when some of this behaviour licences us to use a mental predicate. That would leave us as vulnerable as before to other-mind scepticism. (How do you know this behaviour is really connected with the mental state you ascribe on the basis of it?) Nor is he arguing for any sort of 'operationalism' according to which, all it means to ascribe the mental state is that the behavioural conditions for such ascription are met.

For Wittgenstein, the relation between sensations and emotions, and the physical behaviour, facial expressions, gestures and so on which make them manifest, is not a causal relation between wholly distinct entities; nor is it simply an identity. The inner states find a natural or 'primitive' expression in and through the physical behaviour. This 'expressive' relation is an internal one, in that neither *relatum* can be properly understood apart from the relationship in which they stand. Nevertheless, they remain distinct from one another. To be in pain is not just to display pain behaviour, or even to have a disposition to do so; but it is part of the experience of pain that it finds natural expression in certain types of behaviour. It is this link between sensation and behaviour that enables us to develop a language for inner states, which we can apply both to ourselves and others. For it means that someone else's pain is not irrevocably hidden from us; it is manifested to us in and through her behaviour, while still being more than just the behaviour.

For Chalmers, by contrast, working as he does with a strict dichotomy between first- and third-personal stances, our belief in other minds can only be justified by way of a very dubious argument from analogy:

We note regularities between experience and physical or functional states in our own case, postulate simple and homogenous underlying laws to explain them, and use those laws to infer the existence of consciousness in others (Chalmers, 1996, p. 246).

Chalmers concedes that this argument 'may not be the reasoning that we implicitly use in believing that others are conscious,' but claims that nevertheless, 'it seems to provide a reasonable justification for our beliefs' (*ibid*.). There are several points here to which objections should be made: (1) to the idea that his argument does give us a 'reasonable justification' even in its own terms — the weakness of an induction based on a single instance is obvious; (2) to the notion that our spontaneous response to one another in everyday life need depend upon any process of reasoning, even if it is merely 'implicit'; and (3) to the idea that an inference such as the one he recommends, and which could at best only produce a degree of probability, is needed to support beliefs which we all hold in ordinary life with complete certainty, quite independently of any such inferences. The beliefs themselves stand far more firmly than the foundations Chalmers tries to provide for them.

The difficulties facing responses like Chalmers' to other-mind scepticism are familiar (if not notorious). For Wittgenstein, by contrast, the problem of how we know other minds dissolves if we ask ourselves how we do in practice realise what state of mind somebody else is in. For it then becomes clear that we do not reason on the basis of any analogy or inference; we perceive the other's state of mind in his gestures, in his facial expression, deportment and so on. What we see around us are not bodies, understood objectively as the biologist or even physicist would understand them; we encounter other human beings, and we perceive their pain, surprise, amusement or whatever, in their faces, in their movements and gestures. No inference is involved. The delight felt by someone who unexpectedly runs into an old friend is there to be seen on her face; it is not something that must be inferred from any more basic description.

Consciousness in another's face. Look into someone else's face, and see the consciousness in it, and a particular *shade* of consciousness. You see on it, in it, joy, indifference, interest, torpor and so on. The light in other people's faces (Wittgenstein, 1981, # 220).

To see human actions as mere 'hard' behaviour, as simply the movements of a bit of (complicated) physical stuff, involves a great deal of abstraction. This is not how we normally see one another. Our natural response to human behaviour is to see it as meaningful, as expressive of mind. We are not normally conscious of any gap to be bridged between physical behaviour and the state of mind that finds expression in that behaviour.⁷ But how, then, can we make these Wittgensteinean considerations harmonise with the anti-physicalist argument which I endorsed in the earlier part of this paper? Don't they stand in blatant contradiction to one another, the one affirming and the other denying that there is an essential link between consciousness and bodily behaviour?

The answer to this problem is to treat the 'What it's Like' argument as one stage in a wider dialectic. We start with the idea that it is possible to 'give a complete account of man in *purely physico-chemical terms*' (Armstrong, 1970, p. 67), that is, purely in the language of the natural sciences. Nagel and Jackson then correctly point out that, even if we have all the physical and functional information there is about a person, that tells us nothing about her conscious states. But this is only right if we start from the assumption that the physical/functional information is couched in the language of science — physics, physiology, neurobiology, cognitive psychology. There is no legitimate inference that can be made from such descriptions to any state of consciousness. There are no conceptual connections linking neurons, or abstract functional states, or bodily behaviour described in 'hard' behaviourist terms, with consciousness.

But things are very different if we describe people's physical appearance and behaviour as we do in everyday life — when we say things like 'She was moving quickly, obviously in a hurry, with a worried look on her face, and kept glancing over her shoulder.' Here one could also say that there is no inference from such a description to a state of mind; but only because it is too close for an inference. When we talk about someone's angry tone of voice, or warm smile, or nervous doodling, we are not describing pure physical behaviour from which there might be a problematic inference to mind, but rather, behaviour that it is experienced from the start as expressive of mind. In our everyday experience of social interaction there is no basic level of purely physical description which includes no mentalistic aspects. The scientific description of the body, however, is arrived at precisely by abstracting from our normal — mentalistic — understanding of the human body, so it is no wonder that the mind can't be fitted into the body as understood scientifically.

Philosophers like Jackson and Chalmers take the scientific description of the world in terms of physics and chemistry as metaphysically fundamental. Science, for them, is the bottom-line description of how the world really is. Since they are — rightly — not prepared to endorse Dennett's radical physicalism which refuses to admit the ultimate reality of conscious experience, they are left adding 'epiphenomenal qualia' to an otherwise purely physicalist description of reality. But if we reject qualia on Wittgensteinean grounds, this doesn't return us to a Dennettian physicalism; rather it undermines the whole physicalist world-view, by showing that we cannot take the abstract scientific account of the physical world — and in particular the human body — as revealing what it is really like. We can only integrate mind and body if we understand the body as we do in everyday life, and not as we do in science.

It certainly does not follow from this that we should in any way reject or devalue science, or, more specifically, the scientific understanding of the human body. But it does mean that we should reject the philosophical project of taking science as metaphysics; seeing it, that is, not as a useful human activity which enables us to make more sense of the everyday world in which we live, but as The Truth about The World as it is in itself. Science describes things at a level of abstraction, by leaving out of account a whole range of properties that they have (colour, beauty, consciousness . . .). This is for many purposes a very useful procedure, but it does not follow that the properties with which science concerns itself are

more real than those it leaves out. To see it in this way is to return science to the 'life-world',[§] and to the context of human projects which give science itself its meaning. One brief example; the knowledge a medical doctor has of physiology is deployed in the social and ethical context of caring for the sick. The knowledge a good physician has of her patients is quite different from and irreducible to the knowledge she has of their physiology (vital though that is). But this personal knowledge does not consist of a (dubious) hypothesis that there are private, hidden qualia somehow associated with the physiological machine.

Of course, these remarks are very sketchy. Much more needs to be thought and said about the problem of the relation of the 'manifest image' to the 'scientific image'; the 'life-world' to the world of science. More specifically, we need to think more about what can be called the 'body–body problem' — the problem of relating our ordinary self-understanding as embodied agents to scientific accounts of the human body. But, if nothing else, I hope that I have given reasons to think that it is here, rather than in the mind-body problem as traditionally conceived, that the work needs to be done.

References

Armstrong, D. (1970), 'The nature of mind' in *The Mind/Brain Identity Theory*, ed. C.V. Borst (London: Macmillan).

Chalmers, D. (1996), The Conscious Mind (Oxford and New York: Oxford University Press).

Churchland, P.M. (1985), 'Reduction, qualia and the direct introspection of brain states', *Journal of Philosophy*, **82**, pp. 8–28.

Dennett, D. (1990), 'Quining qualia', in Lycan (1990).

Dennett, D. (1991), Consciousness Explained (Harmondsworth: Penguin).

Jackson, F. (1982), 'Epiphenomenal qualia', Philosophical Quarterly, 32, pp. 127–36; reprinted in Lycan (1990).

Jackson, F. (1986), 'What Mary didn't know', Journal of Philosophy, 83, pp. 291-5.

Husserl, E. (1970), The Crisis of European Sciences, trans. D. Carr (Evanston: North Western University Press).

Kant, I. (1933), Critique of Pure Reason, trans. N. Kemp Smith (London: Macmillan).

Levin, J. (1986), 'Could love be like a heatwave?' *Philosophical Studies*, **49**, pp. 245–61; reprinted in Lycan (1990).

Lycan, W. (ed. 1990), Mind and Cognition (Oxford: Blackwell).

Madell, G. (1988), Mind and Materialism (Edinburgh: Edinburgh University Press).

Nagel, T. (1974), 'What is it like to be a bat?', Philosophical Review, 83, pp. 435–50.

Searle, J.R. (1997), The Mystery of Consciousness (London: Granta).

Tye, M. (1986), 'The subjective qualities of experience', Mind, 95, pp. 1–17.

Van Gulick, R. (1993), 'Understanding the phenomenal mind' in *Consciousness*, ed. M. Davies and G. Humphreys (Oxford: Blackwell).

Wittgenstein, L. (1958), Philosophical Investigations, tr. G.E.M. Anscombe, 2 ed. (Oxford: Blackwell).

Wittgenstein, L. (1981), Zettell, tr. G.E.M. Anscombe and G.H. Von Wright, 2 ed. (Oxford: Blackwell).

Paper received October 1997