ONE MAN'S MEAT IS ANOTHER MAN'S PERSON

Real, full-blooded, substance dualism (hereafter simply 'dualism') – that is, the postulation of (at least) two kinds of thing, mental and physical, which interact in complex ways (and whose complex interactions are constitutive of what we call a person) – is neither a common nor a popular thesis in current philosophical thought.¹ Why, though, has it fallen out of favour? It is often stated, and even more often tacitly assumed, that dualism is ruled out on empirical grounds. I shall argue that there are no such grounds,² but I shall go further and suggest a way of establishing empirical grounds for dualism. I shall also briefly discuss the status of physicalist assumptions about the mind in terms of two concepts from the philosophy of science, which will result in some suggestions concerning the dualist strategy.

i. Dualism

Before I go on, however, I should say something more about what I mean by 'dualism'. This is necessary for a number of reasons. First, dualist approaches to the mind have been for so long in such disfavour that they are rarely discussed in detail; they are most often encountered only in terms of a (dismissive) gesture at a sketch or caricature of so-called *Cartesianism*.³ Secondly, and connectedly, when they are discussed in any detail, this is usually in an historical context, and is confined to the attempt to get to grips with some particular dualist position, especially

¹ Daniel Dennett unashamedly admits that he uses 'dualist' as a pejorative, and many others do the same; the term 'Cartesian' has suffered the same fate in certain circles (see below, n.3).

² John Foster offers a discussion of *a priori* objections to dualistic psychophysical causation in Foster [1991], pp 158–185. He goes on (pp 185–201) to discuss causal closure and causal overdetermination as if they constituted *empirical* objections; as I argue below, I disagree with his categorisation, while accepting most of his arguments.

³ I am unhappy with the term 'Cartesian'. It is used to refer to a variety of positions and beliefs, many if not most of which would have been rejected by Descartes. It is sometimes meant to refer to the beliefs of Descartes' followers; apart from the difficulty of deciding who is to be included in that far from select group, there are scarcely two candidates whose views are not substantially at odds. Add to all this the tendency of some modern writers to use it as little more than a pejorative, and I wonder if we should not be better off dropping it altogether. However, it is used so widely that I have had to pepper the present paper with it, the alternative being a set of unwieldy paraphrases or an obscure new jargon term.

that of Descartes. However, there is no more reason for a modern dualist – even a 'Cartesian' dualist – to follow Descartes' metaphysics in detail than for a modern Platonist to do the same for Plato.

I said above that the dualist position with which I am concerned here involves the existence of (at least) two kinds of thing, mental and physical, which interact in complex ways, and whose complex interactions are constitutive of what we call a person. We are accustomed, because of Descartes, to think that these sorts of thing have completely distinct, non-overlapping essences: body is extended and therefore divisible, mind unextended and therefore indivisible; mind is thinking,⁴ body not. Their relationship is traditionally also clearly circumscribed: one mind and one body (or one mode of physical substance) together interact to form one person. Bodies often exist – and can even behave in complex, purposive, apparently mind-related ways – without minds; minds can in theory exist without bodies, although we have no experience of this (Descartes believed that the mind actually does survive the death of the body, but as a matter of religious faith rather than as a philosophically justifiable thesis).

The modern dualist is free to disagree with most of this. She can deny that minds are completely unextended — can, for example, hold that minds have position (my mind is here, not in the next room); she can deny that minds are indivisible (though she is, perhaps, committed to denying that the mind of a genuine, sane person be divided). She can also allow for the possibility that two minds or more be associated in the relevant way with a single body, and for a single mind to be associated with more than one body. What exactly she would say about the status of the person (or persons) or the nature of the self (or selves) in such cases is not obvious, and would doubtless repay careful discussion — for which this is not the place.

⁴ By saying that the mind is thinking, I mean only that it is the sort of thing that can think; it is not necessary to hold that the mind be constantly involved in ratiocination or perception or the like. One might appeal to a quasi-Leibnizian account of thinking substance, and distinguish between passive and active (apperceptive) thinking substances. And one might then choose to use the word 'mind' only of thinking substances that do in fact actively think.

Thus there is plenty of room for disagreement within dualism, and dualists make good use of that room. In what follows, therefore, I shall use the terms 'dualism' and 'dualist' broadly, making reference to the differences between dualist positions, possible or actual, only when necessary.

ii. Causes

The central problem facing any contemporary dualist is that twentieth-century science denies any causal powers to unreduced phenomenal properties. (Papineau [1996], p.3)

This remark neatly represents the scientism which underlies much opposition to dualism.⁵ It is in fact little more than an appeal to authority — though, oddly, to an authority which is essentially mutable and incomplete: contemporary science. There are, of course, times when philosophers should not only be aware of what science currently holds to be the case, but should trim their philosophical sails accordingly. The question that must be tackled before I go any further, then, is this: what current scientific grounds are there for the anti-dualist position?

The focus of the rejection of dualism is usually the causal connection between mind and body, which is claimed to give rise to insurmountable problems — even to be inconceivable. Of course, if one defines causality as a physical relation (whatever 'physical' means in modern science), one can simply rule out mind–body causal interaction by definition. Presumably, however, that is not what is intended by dualism's opponents (whom, for ease of reference I shall lump together under the rough and ready label *physicalists*⁶); apart from its question-begging

⁵ Interestingly, however, Papineau's remark comes in a review of what is essentially a physicalist account of the mind — that of David Chalmers. Chalmers refers to his position as dualist, but it is at best a sort of property dualism, very far from the full-blooded dualism with which I am concerned in this paper.

⁶ One occasionally encounters writers who talk in terms of giving a *naturalistic* account of the mind when what they clearly mean is a *physicalistic* account. The common (and generally question-begging) identification of 'natural' with 'physical' is one of the problems with which dualists (and conscientious non-dualists) have to deal. The same applies to the related habit of treating the natural as being constituted by the physical.

nature, such a response hardly involves an appeal to the empirical. The same goes for appeals to the principle of *causal closure*:

This is the assumption that if we trace the causal ancestry of a physical event, we need never go outside the physical domain. (Kim [1989], p.143)

This is clearly not derived empirically; rather, it is a methodological principle adopted by physical scientists and certain philosophers, an article of the physicalist faith, part of the physicalist disciplinary matrix, to use Kuhn's term⁷, or of the hard core of the physicalist research programme, to use Lakatos's (I shall have more to say about these notions later). Without the principle of causal closure, it is argued, we can never give a completely physical explanation of the universe — we should be reduced to a 'Cartesian' position, faced with a universe that was only partly explainable within our current scientific disciplinary matrices.⁸ This is of course true, but we are never told why it is supposed to carry any weight. Why must a completely physical explanation of the universe be possible (indeed, why must *any* complete explanation be possible)? The enterprise of natural science certainly does not depend upon such a possibility; indeed, if the dualist is right, and the universe is composed of at least two kinds of substance in causal interaction, there is no reason why a branch of the natural sciences should not arise whose focus is the mental. (Had psychology not largely surrendered to physicalism, it might have filled such a position, and I suppose might yet do so.)

One obvious focus for a natural science unconstrained by physicalist prejudice is the common assumption (see, for example, Dennett [1991], pp 34–35) that the complex set of interactions in the brain is causally closed — that the total quantity of energy involved in brain activity is completely accounted for by physical processes, leaving no room for any causal rôle for a non-physical mind. There are no empirical grounds for this assumption; to the best of my

⁷ Kuhn's account of what started as a very broad notion of paradigms was refined and modified in response to criticism (see, for example, Kuhn [1974]). This is not the place to discuss the notion in any detail; what I have in mind with regard to physicalism in the philosophy of mind is that part of the original notion of a paradigm that Kuhn later called the *disciplinary matrix* — more specifically, the sort of model that provides scientists with a shared ontology.

⁸ See, for example, Jaegwon Kim — below, p.4. On the scare quotes around 'Cartesian', see above, n.3.

knowledge, no scientist has ever attempted to provide such grounds. If it were discovered that there was a mismatch between the energy in the brain and the energy accounted for by purely physical events, then dualism would have received a significant boost. It is true, on the other hand, that a negative result would not rule out dualism, but it might force the dualist to choose between abandoning her dualism and accepting the possibility of causal overdetermination.⁹

Jaegwon Kim offers a curious but telling account of the physicalists' position with regard

to the assumption of causal closure:

Most physicalists will find the Cartesian model unacceptable if not incoherent; they accept the causal closure of the physical not only as a fundamental metaphysical doctrine but as an indispensable methodological presupposition of the physical sciences. If you reject it, you are buying into the Cartesian picture, a picture that no physicalist could tolerate. For it depicts the mental domain as an ontological equal of the physical domain; the two domains coexist side by side, causally interacting with each other, and there is no reason to call such a position physicalism rather than mentalism. (Kim [1996], pp 147–148)

So physicalists reject the Cartesian model and accept causal closure. They accept causal closure because otherwise they would have to accept Cartesianism — and if they accepted Cartesianism,

they would not be physicalists. Leaving aside Kim's invalid move from the rejection of causal

closure to the acceptance of Cartesianism,¹⁰ this presents the relationship between the choice of

the physicalist position and the acceptance of causal closure as almost vapidly circular.

John Biro presents a very similar account (though followed by a comment suggestive of a

certain degree of scepticism):

the simple steps and processes we seek to identify as underlying, indeed, in some sense constituting, complex intelligent behaviour are supposed to be themselves 'dumb', merely mechanical. This requirement springs from a metaphysical concern: it is felt that only thus will intelligent behaviour, and thus the mind, be explainable in respectably physicalistic terms, that is, as subject to the same laws as the rest of the natural world. In our day, this physicalistic assumption is not considered to be in need of defence: the [Cartesian-dualist alternative] is deemed a non-starter, incompatible with the scientific outlook. (Biro [1993], p.52)

⁹ For a discussion of causal overdetermination see, for example, Mill's *System of Logic* Book III, chapter V, section 3.

¹⁰ Unless 'Cartesianism' is being used to mean nothing more than 'non-physicalism' — in which case the move is not invalid, but is little more than tautological.

Again, the circle is not very far from the surface: modern philosophers accept the physicalist assumption without question because the alternative is unscientific — i.e., non-physicalistic.

Perhaps there is a confusion between the claim that there is empirical evidence for a close relation between mental and neurophysiological processes, and the claim that there is empirical evidence against the distinct existence of the mental (that certainly accounts for much *extra*-philosophical argument against dualism.) What is more likely, though, is that anti-dualists have in mind the sort of criticism that was offered against Descartes' position by his contemporaries (and sometimes considered important and difficult to deal with by Descartes himself) — criticism based upon their shared, crudely mechanical notion of efficient causation. Yet, even leaving aside the fact that neither modern science nor modern philosophy still accepts that crude concept, we should note that once again it is simply not empirical, as claimed, but philosophical. No experimental or observational evidence is offered against a causal connection between really distinct substances (what could constitute such evidence?); it is simply claimed that a certain (theoretical) notion of causation makes mental–physical causation difficult to understand.

This is not the place to go into the notion of causation in any depth, but it is worth noting that W.D. Hart, in a fascinating and detailed defence of interactionist dualism, considers the implications for this issue of regularity theories of causation, and concludes that they trivialise the problem because they imply that "there is no more difficulty about brute constant conjunction between mental and physical events than between some physical events and others" (Hart [1971], p.59). He therefore looks for an account of causation that brings out the severity of the problem. I am not convinced that the problem is *not* trivial, and that the regularity theories' implication does not therefore count in their favour, but Hart's preferred alternative – "Causation is energy flow" (Hart [1971], p.68) – brings out the problems inherent in most attempts to explain causation, for what is energy flow itself but a causal concept?

In fact, when one looks at the work of those many philosophers who reject interactionist dualism – for example, Donald Davidson, Peter van Inwagen, David Lewis, John Searle – we find

that none of them offers (or, indeed, claims to offer) empirical arguments against the theory. In so far as they appeal to empirical facts at all, these are intended to back up their arguments for the truth of their own positions (and even then, against rival non-interactionist or physicalist positions).

The rejection of what I have called full-blooded dualism is in fact an assumption made by 'cognitive scientists', neurophysiologists, and the like, not a conclusion drawn from their work. That this is not noticed (or, at least, not acknowledged) by many philosophers is more than a little worrying. I shall return to these metaphilosophical issues in the last section of this paper; for now I should like to move on to a specific example in which the dualist option is usually simply ruled out from the beginning — an example which will lead on to my suggestion that it is at least possible that there be some empirical grounds for *accepting* dualism.

iii. Thought experiments

The philosophy of mind is one of the most fertile breeding grounds for the thought experiment, sending up clouds of the things like pregnant mosquitoes in a conceptual swamp. But, like mosquitoes, the thought experiment is apt to bite the hand that feeds it. If one is not scrupulously careful, an inadvertently begged question can turn an argument for one's theory into a test of one's underlying assumptions.

The example with which I start will be familiar to most readers, and can be found in David Wiggins' *Identity and Spatio-Temporal Continuity*; Derek Parfit's discussion of it in his 'Personal Identity' is perhaps particularly well known. It is one of many brain-transplant and brain splitting examples made popular by a number of writers over the past couple of decades, and Parfit describes it succinctly:

My brain is divided, and each half is housed in a new body. Both resulting people have my character and apparent memories of my life. (Parfit [1971], p.5)

There are three possible results: that I do not survive the operation, that I survive as only one of the two people, and that I survive as both of them.

Now, as a matter of fact it is possible to survive with only half a brain (though one is restricted to a career in management), but for the rest we have to make a couple of assumptions. First, we have to assume that a brain can be transplanted from one human being to another, the 'owner' of the brain surviving the operation. Secondly, given the possibility of survival with only one brain hemisphere, and given the first assumption, it seems reasonable to assume that a semi-encephalic patient could survive if her remaining hemisphere were transplanted.¹¹ Given all this, there seems to be no obstacle to a patient's survival if only one hemisphere of her brain were transplanted, the other being destroyed. But then there is surely no obstacle to such a patient (call her Renée) surviving the *split-brain* transplant, in which the two hemispheres are transplanted into different skulls. As Parfit asks: "How could a double success be a failure?" (Parfit [1971], p.5); it seems unreasonable to suppose that Renée would not survive at all.

Moreover, what reason could we have for claiming that Renée survived as one of the resulting people rather than the other? We need not even make the simplifying (and false) assumption that the two hemispheres are identical; there is no reason to choose one as being Renée (the other being... who?).¹² So that leaves only the possibility that she survive as both people (the possibility with which Parfit is concerned).

It might, of course, be objected that we need to ask various questions concerning the factual background of the thought experiment — for example, we need to know more about the actual nature of the two halves of the brain. One approach to this is typified by Dan Robinson's argument against the production of two Renées:

¹¹ Up to a point, it does not really matter what new scientific discoveries are made concerning the relationship between the brain and the mind; the thought-experiment can be adjusted to allow for them. For example, brain research since Wiggins' and Parfit's discussions has shown the necessity of the reticular formation in the *brain stem* for 'wakeful consciousness'; leaving aside a worry about the notion of 'necessity' in this context, there is no principled problem here. We simply include in our thought experiment a method of duplicating or sharing out the brain stem.

¹² We do, however, have to make the assumption that both hemispheres are potentially persons. Various writers have argued that this is not the case — that the right hemisphere (in most well-lateralised adults) lacks self-consciousness, mainly on the dubious, and in any case disputed, grounds that it lacks linguistic abilities. We can either ignore this claim, account it false (my choice), or pick our experimental subjects from among "adult females, sinistrals of either [sex,] and ambidextrals", who show "a tendency towards bilateral speech functions" (Puccetti [1976], p.66).

Since brain function is not a constant over the life of the individual and since we already know that the two hemispheres are neither symmetrical in function nor identical in, to use a less than felicitous term, content, we have no reason to expect that transplanted hemispheres will constitute transplanted identities. (Robinson [1976], p.77)

Robinson is concerned here with something like identity rather than with Parfit's notion of *survival*, though I take it that he is denying that Renée survives as either of the new people. But in any case this is not the sort of objection I have in mind. On the one hand, as I have said, I am happy to accept all sorts of simplifying assumptions, and on the other, I am not centrally concerned with exactly *who* results from the transplant. My worry centres on Wiggins' and Parfit's shared assumption that both of the new body–and–half-brain combinations will be persons at all. The two writers see the only question as concerning which, if either, of those persons Renée should survive as: both, one, or neither. Of course, in so far as they are discussing what we should say *if* the result of the operation were two people, then I can have no complaint (well, only a minor complaint — see below, p.10). Nevertheless, I think that it is philosophically important to examine the status of the antecedent of that conditional, and to consider what we ought to say if it turned out to be false.

iv. Developing an empirical experiment

Let us return to the thought experiment. Imagine that, after years of successful brain transplants and of thorough research into the physiology of the brain, medical science is ready to try the split-brain transplant. A brain is divided, and each hemisphere placed in its new body; the result is not two surviving persons, but one person and a vegetable on a life-support machine. One transplanted hemisphere always produces a new person (the survivor), while the other always produces a vegetable. Exhaustive investigation in each case reveals no physical difference between the two hemispheres that could account for such a result, and there are no differences between the two parts of the operation. The experiment is tried again, and again — and the result is always the same: one person, one vegetable. What is the explanation? How could a double (physical) success result in a such a (mental) mixed bag? There is one – and, I think, only one – satisfactory answer: each person is partly composed of a mind, whose connections with that person's brain are intimate and strong. The act of dividing the person's brain is not the act of dividing her mind, which at the time of division therefore attaches itself to just one hemisphere. Thus the experimental result points to a certain sort of dualism: it suggests that the person is composed of one mind and one body, and that both are needed for survival.

I said that there is only one satisfactory answer; that is, of course, not to say that there is only one answer. Perhaps the mind is divisible, but merely splitting the brain fails to divide it; perhaps a person's mental component is made up of more than one mental thing (multiple minds of some sort), but there is a strong bond between them. And, of course, it might be that, no matter how advanced the sciences were at the time of the experiment, physicalists would still rather appeal to the existence of a gap in their knowledge than give up their physicalism; that is, they might declare the experimental result an anomaly, and set it aside until the relevant but as yet unknown fact about the brain is discovered. None of these, nor any of the other more or less far-fetched alternatives that come to mind, is as simple or as straightforward an explanation as the one-body/one-mind dualist account (although it is, of course, possible that other empirical evidence might add weight to one or other of them).

Such an experiment provides, then (allowing for the problems indicated by the simplifying assumptions), empirical evidence for dualism. It is rather one-sided, of course, for even if dualism is the only (or at least the best) explanation of the *failure* of split-brain transplants, their *success* would not count against a dualist theory. In fact, modified success might count as evidence for a different form of dualism; for example, both halves might give us persons, only one of them being self-conscious (assuming that we allow non-self-conscious persons), or adult, or recognisably Renée. Indeed, both halves might give us what appears to be a surviving Renée, as Parfit speculates, which would be consistent with a dualism that allowed the divisibility of the mind, or that allowed a single mind to interact with two bodies, resulting in two persons, or (most bizarrely) that postulated that persons have multiple minds.¹³ But that sort of speculation goes beyond the very limited aims I have set myself here.¹⁴

Returning to the original Wiggins–Parfit example, it is clear that, if we simply assume that a logically possible result of the experiment is two surviving Renées, we are ruling out a certain dualist conception of the mind (and so to that extent I have a problem even with the moderate, conditional form of the split-brain transplant example). If the mind is a distinct, indivisible substance, then it is logically impossible that Renée survive as two people. On one central sort of dualist view, even if the result of the split-brain transplant is two people, only one of them can be said to be Renée's survivor, and this view cannot be ruled out by *fiat*, nor by a determined refusal to consider the first-person perspective.

If the sort of experiment described above were performed, and if the result were as I have discussed, that would constitute empirical grounds for dualism. Yet there are no reasons, either empirical or *a priori*, for ruling out such a result.¹⁵ When philosophers do make assumptions about the outcome of such thought experiments, they risk falling into the trap that I described in section iii, above: they fail to notice that an inadvertently begged question has turned an argument for (or a statement of) their theory into a test of their underlying assumptions.

¹³ Another possible outcome would be that only one person is produced by the experiment except in cases involving sufferers from 'Multiple Personality Disorder'.

¹⁴ One further possibility might be worth mentioning, however. Should the split-brain operations go as I have suggested, and a dualist theory be accepted as a result, we might try the same experiment on animals, thus testing Descartes' suggestion (however tentative — see, for example, AT V 277–277) that only human beings have rational souls.

¹⁵ Indeed, even if there were empirical grounds for rejecting dualism, that would not rule out the dualist result of the split-brain experiment; it is hardly unknown for there to be empirical evidence on both sides of a disagreement.

v. The status of physicalism

I made reference in section ii of this paper to Kuhnian disciplinary matrices and Lakatosian hard cores. Although I do not claim to be able to apply either Kuhn's or Lakatos' account of science without alteration to the philosophy of mind, there is some interest in considering the analogies. One of the differences between the two notions is that, while neither those doing Kuhn's normal science nor those engaged in Lakatos' research programmes question the disciplinary matrix within which they are working or the hard core of their programme, Lakatos' researchers make a conscious decision to accept their programme's hard core; if they do start to question it, they are not thereby opting out of the whole scientific enterprise, only out of that particular research programme. Such an opting out is not incomprehensible to those still within the programme, however much they might disagree with their erstwhile colleagues; research programmes are not meaning-incommensurable as Kuhn's disciplinary matrices are supposed to be.

Now, in so far as committed physicalists seem genuinely unable to comprehend the dualist position (for example, describing the dualists' claims as "incoherent", taking principles such as causal closure and the completeness of physics as articles of faith which they seem unable to conceive being questioned), the Kuhnian notion of a disciplinary matrix seems appropriate here. On the other hand, in so far as questioning the central tenets of physicalism does not involve opting out of philosophy altogether, only out of one philosophical research programme, the Lakatosian concept seems more appropriate (however, there are unfortunately physicalists who do seem to believe that those working and arguing outside their programme have something of the philosophical status of flat-Earthers or ufologists¹⁶).

None of this is intended to be taken as an attack on physicalism (though it does seem to me that both Kuhnian disciplinary matrices and Lakatosian research programmes are better fitted

¹⁶ Those few philosophers who argue for dualist positions of one sort or another are generally confronted with, not calm and dispassionate philosophical argument, but high emotion. This is another indication that we are not dealing merely with a disagreement at the level of theories, but with something much deeper.

to the sciences than to philosophy, part of whose essential nature is surely to treat as beyond question no area, no theory, no line of argument). My aim has mainly been to understand a certain sort of physicalist response to dualism. However, if there is any truth in this way of looking at physicalism, the dualist might be able to draw certain conclusions concerning her strategy. Those physicalists who are genuinely in the grip of something like a disciplinary matrix will almost certainly not be persuadable, in the normal philosophical way, by argument. Although I do not suggest that the dualist should stop offering arguments, what is really needed is the sort of crisis described by Kuhn: an accumulation of anomalies, an increasing sense of unease, a return to philosophical engagement with the deeper issues, and ultimately a revolution.

There are in fact signs that such a crisis is building, fuelled partly by recognition of problems centring on the phenomenology of consciousness — what it is *like* to be oneself (like the poor bat i' the adage). Transitional works have begun to appear, such as that of David Chalmers (see Chalmers [1996]); he, like a number of other writers, recognises many of the problems facing physicalism, but cannot quite bring himself to give up most of the physicalist assumptions. He therefore opts for an attribute dualism which is metaphysically obscure, but which has the advantage of pointing to many of the more glaring problems with physicalism proper. My hope is that the resultant shift will not simply be to another Kuhnian-style disciplinary matrix, but will involve an opening out of the philosophy of mind to embrace all strands of genuinely philosophical thought.¹⁷

Peter J. King Pembroke College Oxford

¹⁷ My thanks to Andrea Christofidou and John Foster for their helpful comments on earlier drafts of this paper.

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