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# ***The Philosophical Quarterly***

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## DUALISM/MATERIALISM

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### I

‘It is past controversy’, wrote Locke, ‘that we have in us *something* that thinks; our very doubts about what it is, confirm the certainty of its being, though we must content ourselves in our ignorance of what *kind* of being it is’ (*Essay* IV iii 6). Others, of course, do not scruple to identify the kind, some professing the material, others the immaterial nature of the thinking thing. It is an old and familiar issue that takes at least two forms. One form addresses the question, suggested by Locke’s remark, ‘What is the thing that thinks in us, our (material) brain or our (immaterial) mind?’. A second form addresses the question ‘What is a human being – is it a mind in a body or is it only a body?’. In what follows these questions will be examined and finally rejected, not because we must, as Locke thought, content ourselves in our ignorance, but because the alternatives they present are in the end unintelligible. If successful, my argument will justify the repudiation of both dualism and materialism.

There is a well known controversy concerning the nature of ordinary physical objects such as rubber balls, apples, wads of wax and chunks of chalk. This disagreement helpfully mirrors that between the dualist and the materialist. The ‘dualist’ in this controversy holds that objects are composed of two kinds of thing, sensible properties and the substances that underlie them and ensure an object’s identity through all sensible change. Descartes’ bit of wax, whose substance maintains the bit’s identity through its heat-induced change of properties, is, of course, a dualist conception. The opposing ‘materialist’ denies that objects are composed of two kinds of thing;

instead they are composed only of sensible properties with no substance underlying them. William James, who takes this view in *Pragmatism* (Lecture 3), holds that the notion of an underlying substance must be abandoned; that sensible properties, therefore, do not inhere in a substance; that instead they ‘*adhere or cohere ... with each other*’ (his italics). A piece of chalk (James’ example) is, therefore, to be identified with its cohering sensible properties, not (as in the ‘dualist’ vision) with a substance stuck about with, or clothed in, its sensible properties.

This disagreement concerning the nature of ordinary physical objects (as I said) mirrors the dualist/materialist controversy over human beings. In both, the presence of an indiscernible substance is affirmed by one side and denied by the other. But, more importantly for the purpose at hand, there is also an *agreement* between the Cartesian and the Jamesian that mirrors an agreement between the dualist and the materialist.

In setting forth their views about the nature of pieces of chalk or bits of wax, both sides reify sensible properties. This is revealed in the language that both resort to: sensible properties are for Descartes like clothing, and for James like mosaic tesserae. Having swallowed this camel of reification, the disputants then strain at the gnat of an underlying substance that ‘must’ (or ‘need not’) be present to support such curious items of apparel or building material. If only they had noticed that their shared assumption about sensible properties was a conceptual monstrosity, they would have found here no bone of contention: if there are no clothes to wear, there can be no question of whether there is or is not a wearer.

Concerning the nature of human beings also there is an assumption shared by the disputants, the dualist and the materialist. They assume that a human being’s physical side or aspect is an object. As the Cartesian and Jamesian reify the sensible properties of (say) a piece of chalk and then debate whether those properties taken together *are* the chalk or instead merely clothe its substance, so the dualist and materialist reify the physical side of the human being and then debate whether the resulting ‘thing’ *is* the human being or is instead only a constituent of the human being whose other constituent is ‘the mind’. Such dialectic is roughly analogous to agreeing, disastrously, that the facets of a cut diamond are really, so to speak, its siding, and then debating the pseudo-question whether the stone just is a mock-up of facets or is instead a facet-structure housing an indispensable inhabitant, a diamond-substance.

The non-dualist-non-materialist view embraced here is that the human being (George, let us say) has primacy. One quite correctly attributes muscularity, for instance, to George’s body or perplexity to George’s mind, provided it is understood that in effect the attribution is to George. But if on

dualist/materialist grounds this understanding is rejected, so that 'George' is taken to be an *analysandum*, with 'George's body' and/or 'George's mind' its *analysans*, then these latter expressions come to denote reified aspects of George, and so become fictions like 'chalk-properties aggregate' and 'wearer of chalk-properties clothes'.

With this in mind, one can respond to two objections. The first is this: 'Unlike the sensible properties of pieces of chalk, human bodies already are, to employ the legal term, *res corporales* – like one's pipe and one's bowl. Thus the dualist/materialist debate over whether human beings possess or instead just are bodies does not grow from the seed of conceptual confusion thus identified; there is no such confusion here.' The second objection also denies the presence of such a confusion: 'When we die, what remains of us is a body; our body is viewed by the bereaved, our body is buried. This confirms the first objection's observation that human bodies are not fictions of conceptual confusion but a genuine counter in the debate between dualism and materialism. The body present at death is of course also present in life, when we are a body animated by a soul or else are a living body.'

Both these objections deny the confusion that generates them. Regarding the first, to assert that human bodies are *res corporales* – meaning to imply that it is, for example, not at bottom George, but really George's body that is muscular, weighs fourteen stone, has but one kidney – is to make of 'human bodies' the pernicious fiction already identified. It is to introduce the picture of George's body as either what contains George or what would have contained him were it not that George is the container. But sensible talk of George's body has nothing to do with this picture. The sense of such a remark as 'George's body was once quite muscular but is now withered by illness' would be destroyed or transformed if the remark's subject-element were replaced by such a picture-spawned phrase as 'George's fleshy container' or 'the container that is George'. The subject of the remark, in that case, would be not George but a metaphysical figment. Left in its place, however, the phrase 'George's body' expresses the way in which the very *George* is being looked at, the way in which *he* presents himself (or is presented) to the mind, in the circumstances of the remark. The reverse of this, however, does not hold. That is, it will not do to say that if the remark's subject-element were 'George' instead of 'George's body', 'George' would express the way in which *George's body* is being looked at. For since 'George's body', as one might put it, speaks only of George, the notion that 'George' expresses the way *George's body* is being looked at amounts to the idea that 'George' expresses the way in which *George* is being looked at. But no more does one look at the person one knows to be George *as* George than one *takes* 'what one knows as the cutlery at a meal *for* cutlery' (Wittgenstein,

*Philosophical Investigations*, Oxford: Blackwell, 1958, p. 195). There are circumstances in which George ‘presents himself’ to the mind as ‘George’s body’, but none in which George’s body ‘presents itself’ as ‘George’. George, not George’s body, enjoys primacy.

Regarding the second objection, to proclaim that what remains after death is a human body, meaning to imply that it is *not* indeed the human being himself lying dead, is again to transform ‘So and so’s body’ into the same pernicious fiction; it is to reify a human being’s physical side or aspect, as a bit of chalk’s sensible properties are reified by James and Descartes. We understand the American Civil War verse ‘John Brown’s body lies a-mouldering in the grave’; but we understand too that, free of dualist/materialist confusion, it affirms only that the dead abolitionist, not his ‘reified physical side’, lies there, that *he* is in his grave – as surely as Wordsworth’s Lucy is in hers. As Frank Ebersole’s anti-materialist *mot* has it, ‘A person is not a body seen from a special point of view. Rather, a body is a person seen from a special point of view.’<sup>1</sup> The Civil War verse’s special point of view is, of course, mortuary.

(A recent news story by a writer for the *Washington Post* begins ‘The body of fugitive Andrew Cunanan was found dead of an apparently self-inflicted gunshot wound’. Materialists should prize this for its accuracy of expression. I do so for something else: Cunanan’s body, its face a sepulchral mask, moves zombie-like to the gun on the dresser; it grasps, raises, fires – and is found redundantly dead of a self-inflicted gunshot wound.)

## II

Damage to the brain through injury or disease often results in lessening of functions like speech, comprehension, memory, movement. A brain-damaging blow can reduce an adult to the mental equivalent of an infant. Alzheimer’s disease can do the same. A surgeon can lobotomize, or drugs change, a rancorous man into a passionless couch potato who can no longer get angry or be enthusiastic about anything. It seems clear enough that a healthy brain is necessary to normal human mentation.

Now what is materialism/physicalism? It does not teach merely that we are composed of flesh and blood and bone and that without a healthy brain we could not think. It teaches that the brain is the organ of thought, as the stomach is the organ of digestion; that we think with our brains as we digest our food with our stomachs; that as our stomachs digest our food, our brains think our thoughts.

<sup>1</sup> F. Ebersole, *Things We Know* (Univ. of Oregon Press, 1967), p. 303.

(‘Well, at any rate, to say that our brains think our thoughts no more nullifies the fact that *we* think them than to say our stomachs digest our food annuls the fact that *we* digest it.’ This is quite true. What I urge, however, is not that if our brains think our thoughts, *our* thinking them is nullified, but rather that since the notion of our brains’ thinking is philosophers’ nonsense, as the notion of our stomachs’ digesting food is not, it can serve neither to correct nor to enrich our notion that we think.)

The reflection that a thinking life requires a healthy brain should not make us into materialists. To say that we need a brain in order to think is not to say that our brain does our thinking.

Saying that for us to think requires that we have a brain is like saying that for us to run requires that we have leg muscles. *We* do the running; our leg muscles do not do it for us, even though without them we could not run. Likewise, *we* do the thinking; our brains do not do it for us, even if without them we could not think. Leg muscles do not have fast times or personal bests; brains do not total up grocery bills or get angry about an overcharge.

One materialist objection to all this goes as follows. It is true in the case of running that we do not have some organ that does our running for us: it is we who run. But this only means that it is our body-as-a-whole, rather than some part of it, that runs. Likewise, it is true that we do not have some organ that does our thinking for us, as our stomachs do our digesting for us; it is we who think. But here too this only means that it is our body-as-a-whole, rather than some part of it, that thinks. Thinking, like running, is a function of the whole person. But the whole person just is the person’s body, nothing more. Since materialism holds that a human being is strictly identical with his body, one does not escape materialism by insisting that we, not our brains, think. One escapes one form of the doctrine only to be captured by another.

This body-as-a-whole rejoinder might also be made against an objection to Richard Taylor’s materialist remark that a toothache is a state of the tooth, not of the soul. The objection is that although the tooth aches, it certainly is not in pain. The rejoinder is that it is the person whose tooth aches who is in pain – that is, it is that person’s body-as-a-whole that is in pain, for the person just is that body.

But whether employed to defend Taylor or to reply to the objection that our brains do not think for us, the body-as-a-whole rejoinder is born of the reifying confusion described earlier that produces a ‘body’ to replace the human being.

There is a second materialist response to the view that our brains do not think for us. It is simply ‘Oh yes they do!’. When we recall our mother’s maiden name, for instance, it is our brain doing the remembering. So the

analogy with the stomach appears to go through. Indeed, it seems that once we know enough about the brain we shall be able to affirm that, in general, mental states are identical with brain states: that the condition of being in pain, for example, is a condition of the brain and the nerves.

The identity claimed here seems to amount to the 'identity' that obtains between the music that plays from the stereo and the topography of the grooves of the record being played. That is, it seems more a correlation than an identity. The materialist might concede this, but insist that correlation is enough to justify the claim that the brain remembers – as the stereo and record produce the music. To this I think the response should be: it may be true that certain brain traces enable me to remember my mother's maiden name, and my remembering it on a particular occasion may correlate with a quite specific remembering-my-mother's-maiden-name brain event; the sum of this, however, is not that my brain remembers my mother's maiden name (perhaps feeling a bit proud of being able to do so after so many years<sup>2</sup>), but that I do. Likewise, it may be true that my capacity for toothache requires a healthy brain and nervous system, and that my suffering one correlates with quite specific brain and neural goings-on; but *I* am the sufferer, not my brain and nervous system, nor again my tooth – nor yet again my 'body', that monstrous fiction of reification which in the materialist's imagination replaces me.

But it is clear that some materialists will find unfair a rejoinder that depends on the notion of a mere correlation of mind and brain states and events. They will insist that by 'identity' they mean identity, not correlation.

In her book *Neurophilosophy*<sup>2</sup> Patricia Churchland presents herself as such a materialist. At one point (pp. 328–9), she writes as follows:

*if in fact* mental states [including sensations] are identical to brain states, then when I introspect a mental state, I do introspect the brain state with which it is identical. Needless to say, I may not *describe* my mental state as a brain state, but whether I do depends on what information I have about the brain, not upon whether the mental state really is identical to some brain state.

It is clear that Churchland believes it possible that mental states are not merely correlated with, but identical to, brain states, and that future developments in neuroscience may well show this to be the case. She believes these developments could convince me that 'when I introspect a mental state, I do introspect the brain state with which it is identical'.

One difficulty with Churchland's position emerges over sensations, of which she says she has 'no wish to deny introspective awareness' (p. 328). What *should* be denied, I think, is that 'introspective awareness' of pains,

<sup>2</sup> *Neurophilosophy: toward a Unified Science of the Mind-Brain* (MIT Press, 1986).

tickles and dizzy spells is an intelligible notion. One *has* or *suffers* pains, one does not have 'introspective awareness' of them. Suffering pains, it seems, does not constitute introspective awareness of *anything*, including brain states.

But although Churchland may retract the notion that we have introspective awareness of our sensations, she may nevertheless insist that just *having* a pain or dizzy spell constitutes (or may constitute) an instance of introspective awareness of a brain state.

Let us examine the notion that having a sensation constitutes the introspective awareness of a brain state. Some people sometimes experience visual sensations of light flashes, often accompanied by an awareness of 'floaters' in the vitreous humour of the eye. Both the sensations of light and awareness of floaters, as I understand it, are due to the vitreous humour pulling away from the wall of the eyeball. In my own case the light flashes are crescent moons at the edges of my visual field.

I call these flashes 'sensations' – 'visual sensations'. I think that if anything is to be called a visual sensation these are. In contrast, my awareness of floaters is not a visual sensation, but instead a case of visual perception. That is, floaters are commonly detritus in the vitreous humour that one is really seeing. I think the flashes, however, are not something there to be seen like a lightning bug's light. So I call them sensations.

A pamphlet of the American Academy of Ophthalmology sets forth the following information: floaters are 'tiny clumps of gel or cellular debris' that are 'actually floating in the fluid inside the eye' and 'are frequently visible when [one is] looking at a plain background, such as a blank wall or blue sky'. It seems clear that the phrase 'visual perception', rather than 'visual sensation', accurately describes the experience of floaters, for, like the moon, floaters are there to be seen or not. On the other hand, the pamphlet seems to endorse the phrase 'visual sensation' for the experience of light flashes; for this experience is described as the 'illusion of flashing lights', a 'sensation', whose cause may either be the rubbing or pulling of the vitreous gel on the retina, or (in the case of the 'jagged lines or "heat waves"' characteristic of ophthalmic migraine) may be 'a spasm of blood vessels in the brain'.<sup>3</sup>

Churchland may agree or disagree that light flashes are sensations. If she disagrees, she might explain my quarter-moons as brief intra-ocular illuminations – perhaps an electrical phenomenon somehow produced by motion of an ageing vitreous humour that now only partially fills my eyeball – and my perception of those illuminations as constituting an introspection of that electrical phenomenon.

<sup>3</sup> This information is taken from *Floaters and Flashes* (American Academy of Ophthalmology, 1985, revised 1990), pp. 1–4.

If, on the other hand, Churchland agrees that my crescent moons are visual sensations (that experiencing those flashes is a case of having such sensations), then there are no intra-ocular illuminations for me to see, no electrical phenomenon for my quarter-moons to be identical with, and hence no introspection of an ocular event for my *having* quarter-moon visual sensations to be re-identified as.

To this she may object that from the absence of a visible electrical phenomenon it does not follow that there is *no* physiological or neurological event for my (having) crescent moon sensations to be identical with. It is perfectly true that this does not follow. But if such an event is not one that is visible to me (as is the electrical phenomenon if my moons are a matter of visual perception), then the *identity* of my visual sensations (or of my having them) with the event seems out of the question; instead, it seems one would have to settle for correlation, the physiological event correlating with (and presumably causing) the sensation. This in fact is what the American Academy appears to endorse, in citing the vitreous gel's pulling on the retina and spasms in cerebral blood vessels as causes of visual sensations of light.

Churchland believes that sensations can be identical to brain events or states, and that, if they are, when I introspect a sensation I introspect a brain state. It seems to me that (a) I *have* sensations, I do not introspect them; (b) there is no brain state or process with which my having a sensation is identical (as there is no ocular event with which my having a crescent-moon sensation is identical); and hence (c) there are no introspections of brain states that my having sensations constitutes.

In examining Churchland's and other materialist notions, I have so far found nothing to convince me that one's brain is mentally active because mental activity is really brain activity, and nothing to convince me that it is not I who suffer pains and crescent moons, recall my mother's maiden name, fidget over how to express my misgivings about neurophilosophy, and so on – nothing to indicate that George and I do not enjoy primacy.

### III

The last item to be examined is dualism's and materialism's competing accounts of perception, of what it is for me, for instance, to see my neighbour's tabby snoozing in the sun on top of my back fence. Representing dualism, a Lockean may respond that it is to have certain 'sensations or perceptions' that are produced by 'modifications of matter' in the cat.<sup>4</sup>

<sup>4</sup> Locke himself was not a doctrinaire dualist. He thought the soul's immateriality undemonstrable but probable (*Essay* IV iii 6), and made the notion a working hypothesis in the *Essay* (II xxvii 27).



It is important to notice that this response does not distinguish sensations from perceptions. The phrase ‘sensations or perceptions’ betokens a conceptual union whose offspring has several names, such as ‘phantasm’, ‘intelligible object’, ‘idea’, ‘sensus’, ‘sense-datum’, ‘experience’, ‘percept’, ‘sensation’ and ‘perception’, but, alas, a disputed residence – the mind or understanding, the sensorium, at part of a physical object’s surface (in case the sense-datum is, as it may be, *identical* with that part), or at a point somewhere along one’s line of vision where sight flowing from the eye meets an appropriate motion from an object.

In this conceptual union, perception takes on sensation features, so that, for example, my seeing tabby is understood to involve my having a tabby-form visual sensation, which, like such actual sensations as pains, tinglings and tickles, has a place or location. – As though to the question ‘Where do you see the cat?’ there could be an answer paralleling an injured child’s to the query ‘Where does it hurt, dear?’. To the question ‘Where do you see the cat?’, the reply is either ‘On my back fence’ or ‘I am at my dining-room window looking at it on the fence’, but most certainly is not the senseless ‘In my mind’ or ‘In my sensorium’.

For greater appreciation of sensationized perception, let us return to the case described earlier of my crescent-shaped flashes of light caused by the eye’s vitreous gel rubbing on the retina. This is, as I mentioned, if anything is, a case of visual sensation. The flashes are not there in the eye (as floaters are) for an ophthalmologist to notice during an eye examination; there are only the flashes suffered. Likewise, in sensationized perception, in my seeing tabby on the fence I have, not a simple crescent-moon visual sensation, but a marvellously intricate and slow cat-flash – seen-suffered, but nothing publicly visible. What is there to be seen, i.e., the cat, is never seen. Mine eyes dazzle.

There are, of course, also aural sensations, of which the ringing ears of so-called ‘subjective tinnitus’ is an example. To hear a recording of Glenn Gould playing the *Goldberg Variations* would, on the sensationized account, be to have an extended, highly modulated episode of ear-ringing – something heard-suffered, but nothing publicly audible. Aural sensations, not aural perception.

This ragging may leave the proponent of sensationized perception unmoved. Possibly he finds the familiar argument from sensations of heat and pain compelling, and thinks the nature of seeing and hearing must be understood in terms of it. The argument bids us consider what we feel when we place our hands at a little distance from a fire and then what we feel on placing them too close: warmth in the first case, pain in the second. Reflecting on this, I must (according to the argument) admit that as it is I

who have pain, so it is I who am warm, that just as the fire is not in pain, so it is not warm or hot – for, like pain, heat is a sensation.

Perhaps because warming before a fire or in a heated room or in a hot bath is common and light flashes and ear-rings are rare, the sensationized perception of heat charms us more readily than does that of (say) tabby on the fence. Locke, for one, seems to find heat's sensationized perception not only convincing but paradigmatic: after presenting the heat–pain argument he straight away applies its lesson to tastes, odours and sounds, as well as to colour perception: the whiteness of snow, like the heat of a fire, is 'in us', just as pain is (*Essay* II viii 16–17).

But though perhaps almost irresistibly charming, the 'sensationized perception' of heat, like that of music or of the cat on the fence, is a howler. An example or two should make this clear. One may hold one's hands over the old wood stove to warm them (sensations of warmth or of heat) or to determine the stove's thermal condition for cooking (perception of warmth or of heat). One may enter a room to warm up (sensation) or to tell by its feel whether a room is warm (perception).

It might be thought that 'sensationized perception' is a sensible notion, not because perception is, or is reducible to, sensation, but because it is *by way of having* sensations that one perceives (cf. Thomas Reid's *Essays on the Intellectual Powers of Man* II 16). This suggests that one determines that an electric blanket is warmed up only by being warmed by it. Certainly one may grow comfortably warm under the blanket even as one feels the blanket getting warm; and, more to the point, one may tell *by one's being warmed by it* that the blanket is producing heat. (One might also find that the stove is hot by holding one's hands over it, not to see if it is hot, but instead only to warm one's hands.) But one may also feel the heat of the blanket without being warmed by it. When one is cold and covers oneself with an electric blanket, one ordinarily feels the heat of the blanket first and only later begins feeling warm. One may perceive the blanket's heat without having a 'getting warm' sensation, and so without having a *mediating* 'getting warm' sensation.

But despite my charge that 'sensationized perception' is philosophical nonsense, there is a consideration that seems to force us to accept the notion. It is the consideration that (in Locke's words) 'modifications of matter in ... bodies cause ... perceptions in us'. The stove, then, is not hot as we perceive it to be; rather, the 'modifications' or 'motions' of the stove's 'insensible parts' produce in us sensationized perceptions of heat (see *Essay* II viii 7, 10, 17). Since the stove's heat is really only the motion of its parts, and since one none the less perceives heat, what one perceives – or, better, what one *has* – must be a sensationized perception of heat.

As a property of the stove, heat, on this account, just is motions of the stove's insensible parts. This may remind us of the kinetic theory of heat, in which the atoms or molecules comprising an object are said to vibrate with greater rapidity and amplitude as the object grows hotter. But this theory does not identify an object's heat with its molecules' vibrations so that its feelable heat must be only sensationized heat-perceptions.

The theory says, for instance, regarding a stove that is hot, that the stove's molecular structure is in a certain state of excitation. The heat is not identified with, or reduced to, those molecular motions and thus eliminated. The theory does not (absurdly) seek to explain heat's presence by nullifying it – any more than does the kinetic theory of solidity seek to explain a floor's solidity by nullifying it.<sup>5</sup>

Perhaps it is impossible to say which howler is more basic, the notion of sensationized perception or the misunderstanding of kinetic theory. Does one accept 'sensationized perception' first and then find 'scientific' support in the misunderstanding of the kinetic theory? Or does one begin with the misunderstanding and then find sensationized perception a necessary consequence? In any case, the two mistakes taken together nullify a perceivable property of the stove, its feelable heat, and replace it with sensation-perception, a feeling of heat or a feeling hot.

With small adjustments, this diagnosis also applies to colours, tastes, sounds and odours. Is snow white? Well, no. Its colour is a sensationized perception produced by ..., etc. Do I hear Glenn Gould's performance of the *Goldberg*? Not exactly – no, not at all. I only have glorious *Goldberg* aural sensations caused by sound waves produced by my stereo sound-wave-making equipment. The stereo makes not a peep. Do I see my neighbour's tabby on the fence? Again, no. Only light waves bouncing from the cat invade my eyes, there (or somewhere) to produce a tabbiform sensationized perception. But tabby is no more yellow with darker tiger stripes than snow is white or the stove hot.<sup>6</sup>

Finally we must single out materialism. Does it escape the two blunders? Here are two remarks by a well-known materialist philosopher. First: 'Heat ... is molecular motion'.<sup>7</sup> This pronouncement is Lockean. It identifies the quality of heat (as distinguished from its 'idea' in us) with motions of singly insensible parts. It does not, as the kinetic theory does, explain heat's

<sup>5</sup> Cf. Wittgenstein, *The Blue and Brown Books* (Oxford: Blackwell, 1958), p. 45.

<sup>6</sup> For a reminder that these mistakes are not confined to great philosophers of the past, see Norman Malcolm, 'Kripke on Heat and Sensations of Heat', *Philosophical Investigations*, 3 (1980), pp. 12–20, repr. in his *Wittgensteinian Themes: Essays 1978–89*, ed. G.H. von Wright (Cornell UP, 1995), pp. 45–55.

<sup>7</sup> Paul Churchland, *The Engine of Reason, the Seat of the Soul* (MIT Press, 1995, hereafter *ER*), p. 207.

presence in terms of molecular excitation; instead, it is a 'scientific reduction' which, I suggest, nullifies that whose presence it would explain, as does the mistaken reading of the kinetic theory of solidity.

Does materialism provide a substitute for what it mistakenly supposes is nullified by science? Yes. Like Locke and many others, it resorts to sensationized perception. This is evident in a second Lockean pronouncement by the same materialist philosopher: '*perception consists in the conceptual exploitation of the natural information contained in our sensations*'.<sup>8</sup> My seeing tabby on the fence crucially involves my having visual 'sensations' that contain 'natural information'. My feeling (i.e., perceiving) the stove's heat must involve my having sensations (presumably of warmth). In the case of the philosopher's own example of Mary, who after a lifetime of colour-blindness has her colour vision restored so that for the first time she sees the red colour of a ripe tomato set before her, what she comes 'to know' is 'the sensation of red'; 'the object of Mary's ... knowledge is one of her own sensory states' (*ER* p. 202). (Here the whiff of solipsism's stale air may remind one of Locke's credo that 'all our knowledge consist[s] ... in the view the mind has of its own ideas'.) Again, as in Locke, what disappears as an object of perception returns as the content of a 'sensation'; what misunderstood science nullifies, philosophical confusion replaces.

If materialism and dualism share these two blunders, wherein do their accounts of perception differ? A materialist's version of the difference seems accurate: 'Like the assembled pixels on a TV screen, the overall *pattern* of neuronal activation levels at any given instant constitutes the brain's portrait of its local situation here and now. And like the TV screen once more, the temporal *sequence* of these ever changing patterns constitutes the brain's ongoing portrait of the ever changing world' (*ER* p. 6). The materialist then asks the question that will distinguish his account from the dualist's, 'Who ... can be *watching* this pixellated [*sic*] show?', and replies 'The answer is straightforward: no one. There is no distinct "self" in there, beyond the brain as a whole' (*ER* p. 8). The dualist affirms, the materialist denies, that there is a self in there.

One can be in sympathy with both of these positions. With the dualist's, because one blushes to boil down seeing to the notion of an on-going portrait that no one is watching, a security station abandoned with the TV monitor left on; and with the materialist's, because just ahead for dualism one spots a slippery slope – put a guard at the TV monitor and one seems obliged to posit a guard inside *him* to account for *his* seeing – and so on and on. The attraction of each position stems from the absurdity of the other.

<sup>8</sup> Paul Churchland, *Scientific Realism and the Plasticity of Mind* (Cambridge UP, 1979), p. 7 (his italics).

Locke, by the way, felt the predicament: 'he who will give himself leave to ... look into the dark and intricate part of each hypothesis, will scarce find his reason able to determine him fixedly for or against the soul's materiality. Since ... the difficulty to conceive either will, whilst either alone is in his thoughts, still drive him to the contrary side' (*Essay* IV iii 6).

Embracing either position – a seer in the brain or no seer in the brain – has unacceptable consequences. Let us back away, then, from the visual cortex, past the lateral geniculate nucleus and retinal neurons, into open air, and reconsider.

Earlier we noted that making two mistakes (one concerning certain scientific explanations, the other sensation and perception) transforms perception into something such that one does not *see* (say) a cat, but instead *has* something, a cat 'sensationized perception'. If only the two mistakes are avoided then, perception remains – and so does the perceiver, who is not an unextended, immaterial security guard watching a pattern of pixels in the brain, but is instead the same George who walks, talks, remembers, and so on.

A defender of materialism may respond as follows: in intending to demolish materialism, you have only conceded all that it seeks to establish. Materialism seeks only to show in detail what must be the condition of, and what must happen in, one's eyes and brain as one sees a cat. In this enterprise, clearly it does not deny that seeing occurs, or that George is the seer.

No one but a dualist would reject *this* version of materialism's aims. A description of what goes on (and must go on) in George's cranium *as* George sees a cat is philosophically unobjectionable, since it does not imply that he does not see the cat. But because materialism rests on mistakes that transform perception into 'sensationized perception', it must take itself to be describing seeing the cat – that is, it must be taking certain events (and conditions) in George's cranium to *be* seeing the cat.

Here the materialist may resist. He may insist that the description he offers implies no denial that one sees the cat, but instead that it discloses facts that should alter our understanding of who (or what) we are. The 'one' that sees the cat is one's brain, perception being one of the brain's functions. Thus, benighted, we say that George sees the cat, but eventually we must understand that the perceiver is George's brain – and, moreover, that George just *is* George's brain (and body).

Thus would the materialist destroy or denature everything 'George enjoys primacy' epitomizes. But in his zeal he falls to the allure of three deadly, hilarious eliminative identities: perceivable properties become particles in motion; perception, by being sensationized, turns into neuronal activity; and a perceiver becomes a brain in a body.

Our rebuttal is that ‘particles in motion’ does not nullify the perceivable properties it seeks to explain; ‘neuronal activity’ is not a reduction of, but is doubtless necessary to, perception; and a perceiver is not a brain in a body, since ‘body’ here is a conceptual confusion, like the Cartesian–Jamesian reification of sensible properties. George, the perceiver, is not his body, for his ‘body’ is in this context a reification of his physicality or physical aspect, and George is not an aspect of himself.<sup>9</sup>

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<sup>9</sup> An early draft of this essay was read at a conference honouring Frank Ebersole in the spring of 1996. I am grateful to Ebersole, William Holly, John Powell, Roger Cole, Emanuel Pacheco and Kelly D. Jolley for their helpful comments on that occasion, and, for help with a later draft, to Henry A. Alexander, J.C. Lewis, David A. Wolfe, R.E. Lewis, Jeffery K. Herbert and anonymous readers for *The Philosophical Quarterly*. The present version is presented in grateful remembrance of my mentor, O.K. Bouwsma. From his example one learned both to suffer a problem patiently and to have fun with it.