From: *Minds and Persons* edited by Anthony O'Hear (Cambridge University Press 2003)

Mental Substances[1]

Tim Crane
University College London

1. Do minds exist?

Philosophers of mind typically conduct their discussions in terms of mental events, mental processes, mental properties, mental states – but rarely in terms of minds themselves. Sometimes this neglect is explicitly acknowledged. Donald Davidson, for example, writes that 'there are no such things as minds, but people have mental properties, which is to say that certain psychological predicates are true of them. These properties are constantly changing, and such changes are mental events'.[2] Hilary Putnam agrees, though for somewhat different reasons:

> The view I have long defended is that the mind is not a *thing*; talk of our minds is talk of *world-involving capabilities that we have and activities that we engage in*. As Dewey succinctly put it, "Mind is primarily a verb. It denotes all the ways in which we deal consciously and expressly with the situation in which we find ourselves. Unfortunately, an influential manner of thinking has changed modes of action into an underlying substance that performs the activities in question. It has treated mind as an independent entity *which* attends, purposes, cares and remembers". But the traditional view, by treating mental states as states of the "underlying substance", makes them properties of something "inside", and, if one is a materialist philosopher, that means properties of our *brains*. So the next problem naturally seems to be: "*Which* neurological properties of our brains do these mental properties 'reduce' to?" For how could our *brains* have properties that *aren't* neurological? And this is how materialist philosophers saw the problem until the advent of such new alternatives in the philosophy of mind and philosophy of language as Functionalism and Semantic Externalism.[3]

---

[1] This paper is intended as a preliminary attempt to bring together issues in the mainstream of the philosophy of mind and the personal identity debate. I am grateful to audiences at the University of Nottingham, the Australian National University, University College London and at the Royal Institute of Philosophy for generous and constructive criticism. I would like also to thank Robert Black, Martin Davies, Stephen Everson, Katalin Farkas, Mike Martin, Hugh Mellor, Peter Menzies Michael Smith and Daniel Stoljar for especially helpful discussion.

[2] Donald Davidson, 'Davidson, Donald' in *A Companion to the Philosophy of Mind* Samuel Guttenplan (ed.) (Oxford: Blackwell 1995) 231.

[3] Hilary Putnam, *The Threefold Cord: Mind, Body and World* (New York, Columbia UP 1999) 169-170; the quotation from Dewey is from J. Dewey, *Art as Experience* in *John Dewey: The Later Works, 1925-1953*, vol. 10, 1934 (Carbondale, Ill.; southern Illinois UP, 1991) 268.

What is the idea behind this denial that the mind is a thing? Putnam's own reasoning here seems somewhat incomplete. The traditional view he is rejecting moves from saying that mental states are states of an 'underlying substance' to saying that they are 'inside' the subject, and from there to the idea that mental states must be states of the brain if one is a materialist. But what is the connection between a *thing* and being an 'underlying substance'? And why does that mean that the states must be 'inside'—and what does 'inside' mean here, in any case? Philosophers do frequently argue that mental states are brain states without (or so it seems) making the prior explicit assumption that mental states must be states of an underlying substance.[4] So what role does the idea that *the mind is a thing* play in this dialectic?

The situation is not helped by the fact that there is something initially unsatisfactory about the positive suggestion Putnam is offering. Putnam says that talk about the mind is really talk about 'world-involving capabilities that we have and activities that we engage in', and he quotes Dewey's view that the mind refers to 'all the ways in which we deal consciously and expressly with the situation in which we find ourselves' and Dewey's rejection of the view that a mind is 'an independent entity *which* attends, purposes, cares and remembers'. But, on the face of it, there is a conflict between the idea that mental talk is talk of *our* activities, and the idea that there is *nothing* which attends, purposes, cares and remembers. Do Dewey and Putnam really mean that there is nothing – no entity, in the broadest sense – which is doing the attending, caring and remembering? Surely not. Their rejection is a rejection of the idea that it is an entity *of a certain kind* which attends, purposes and so on. But what kind? The candidates for being these entities, which are doing these things, can hardly be properties, processes or events. The obvious answer – suggested by Putnam and Dewey's talk of 'our' activities –

---

[4] See, e.g., David Lewis' An Argument for the Identity Theory' in Lewis, *Philosophical Papers* Volume I (Oxford: Oxford University Press 1985), where no such assumption is explicitly made.

is that it is people (or persons) who are participating in these activities. But people are good candidates for being *things*, at least in the sense of being particular objects, the bearers of properties. And what is supposed to be so problematic about the idea that people are things?

One possible source of a problem here is not the idea that a person remembers, attends and so on, but that a *mind* does. The suspicion might be directed against the idea that there are mental *things*, which we call minds. This might explain Dewey's denial that 'there is nothing *independent*' which does these things, if 'independent' is meant to have the connotations it has in traditional discussions of substance: on one dominant tradition, substance is that which exists independently, or capable of independent existence.[5] Here, then, is a link to the idea of substance. But there is still not an obvious objection contained in this link: for there is an obvious sense in which the persons who are the subjects of these mental activities are 'independent' of one another (though this may not be the sense in which Dewey uses the term).

The question I wish to address, then, is this. Given the implausibility of denying that when there is mental activity there is something which is the subject of this activity, why is it that philosophers have found themselves denying that what thinks (remembers etc.) is a mental thing? One reason has emerged: a suspicion of the idea of a *thinking thing* or mental substance in the Cartesian sense.[6] Suspicion of this idea might come from two distinct sources: first, a suspicion of the role that the idea of mental substance has played in framing the mind-body problem, and in traditional controversial theories of the mind-body relation (notably Cartesian dualism). And second, it might come from suspicion of the idea of substance in general.

---

[5] For recent defences of this idea of substance see Gary Hoffman and Joshua Rosenkrantz, *Substance: its Nature and Existence* (London: Routledge 1996), and E.J. Lowe, *The Possibility of Metaphysics* (Oxford: Clarendon Press 1998). Some of these claims are discussed in section 3 below.

[6] Thus Jaegwon Kim writes: 'The idea of minds as souls or spirits, as *entities* or *objects* of a special kind, has never gained a foothold in a serious scientific study of the mind and has also gradually disappeared from philosophical discussions of mentality… There has been a near consensus among philosophers that the concept of mind as a mental substance gives rise to too many difficulties and puzzles without compensating explanatory gains.' *Philosophy of Mind* (Boulder: Westview 1996) 3.

My aim in the rest of this paper is to argue that these suspicions are not well-founded: the mind-body problem (in the sense in which it is debated today) does not essentially rest on, or even derive from, the idea of a mental substance. On this matter, I think, Putnam is partly right: it is true that mental substances or subjects are sometimes rejected by materialists because they are supposed to be the main source of the mind-body problem. But these materialist philosophers are, nonetheless, wrong; insofar as we have a mind-body problem today, it is not primarily the result of the idea of mental substance.[7] Therefore rejecting the idea of mental substance does not help us solve the mind-body problem.

However, the idea of a mental substance might be objectionable on other grounds – for example, if the idea of substance itself is objectionable. So the second theme of this paper is the idea of substance. Though frequently attacked, this is one of the most pervasive, resilient and fertile ideas in metaphysics. I will outline some general elements of a concept of substance, and say something about what an acceptable notion of mental substance might be. My ultimate aim would be to defend the thesis that *persons* are, in a certain sense, mental substances; but I can only gesture at what this might mean here.

2. The mind-body problem: a traditional view

Presentations of the mind-body problem tend to start with something like the following line of thought. Descartes argued that minds were substances distinct from bodies. Bodies are made of matter or material substance, characterised by its characteristic attribute *extension*, and the existence of matter was ultimately independent of the existence of minds. A mind is a mental substance, and it is characterised by its characteristic attribute, *thought*. Minds and bodies interact, but this interaction is seen to be deeply problematic because mental and material substances are so completely different in character. Mental substances are thought to be at best causally problematic, and at worst unintelligible. Now the Cartesian view is often presented as having some intuitive appeal, even though it is unacceptable, and the mind-body problem is therefore posed by the question of how to articulate an adequate alternative to the Cartesian view, given that we must reject its commitment to two substances.

---

[7] For agreement on this point, see David Rosenthal 'Identity theories' in Samuel Guttenplan (ed.) Op. Cit. 348.

One idea which we must dismiss at this stage is that the unintelligibility of mental substance comes from the idea that on the Cartesian view, minds are 'made of' mental substance, just as bodies are made of matter.[8] This reading of 'mental substance' trades on the ordinary language use of 'substance' as meaning *stuff* – this is the mass noun use of 'substance', as in 'tar is a thick black sticky substance'. There is nothing wrong with using the word 'substance' in this way, of course. But with the word understood in this way, a *mental* substance is certainly something very strange: rather like a ghost, made of some mysterious 'ectoplasm'. And this cannot be what Descartes meant by mental (or thinking) substance, since on Descartes's view the mind is not made of anything at all. The mind is a simple substance, it has no parts (though it has faculties or capacities), it is fundamentally and essentially indivisible. The term *substance* is being used by Descartes in a technical, traditional philosophical sense. A substance in Descartes's sense is what exists most fundamentally, an idea which is partly spelled out in terms of the idea of independent existence (see section 3 below for further discussion). So an important aspect of this definition is that there as many *individual* substances as there are things capable of independent existence: the Cartesian view is that each individual mind is an individual mental substance, not that minds are 'made of mental substance'.

---

[8] This view is still quite common in contemporary philosophy. For example, when discussing dualism, Frank Jackson says that 'ectoplasm is to be understood as the kind of stuff incompatible with the physicalists' view of what kinds there are—perhaps the stuff out of which thoughts are made according to Descartes.' *From Metaphysics to Ethics* (Oxford: Oxford University Press 1998) 15. For a useful corrective, see E.J. Lowe, *The Possibility of Metaphysics* (Oxford: Clarendon Press 1998) 201.

This idea that things are 'made of' substance is more applicable to Cartesian material substance, since it is true on the Cartesian view that everyday objects are just bits of matter (or material substance). But this idea of substance is still connected with the idea of a particular thing capable of independent existence: the material world is one substance. Human bodies are not substances, they are just portions of the matter of the material world itself, which is the only material substance.

Another construal of substance which we must reject is that which construes it as a 'featureless substrata', underlying all matter; or, applied to a particular object, a 'bare particular' with no properties as such. G.E.M. Anscombe has pointed out clearly the fundamental confusion in this view: in attempting to answer the question 'what is substance?' we start off saying that it is the bearer of properties, but end up saying that 'in itself' it has no properties at all.[9] But surely if we define substances as *essentially* the bearers of properties, then we have already said enough to rule out the idea that substance can be featureless or without properties: for it follows from this definition that there can be no substance without any properties at all.

These qualifications made, how is the idea of mental substance connected to the mind-body problem? As mentioned above, there are two dominant lines of connection: first, that mental substance is unintelligible, and second, that causal interaction is problematic. These days, the focus is on the second, for the following reason. Assuming (as is fairly standard) a fairly liberal approach to metaphysical and logical possibility, many philosophers argue that there is nothing in principle impossible with the idea of Cartesian mental substance, or even that there is nothing in principle impossible in the idea that there are disembodied beings.[10] Rather, the resistance to Cartesianism is based on the idea that *our* world is not like this. There may be possible worlds which contain Cartesian substances, but our world is not one of them. The reason for this is that we know enough about the physical world to know that physical things only come about through physical causes, and that since mental things do have physical effects, they must themselves be physical. This is the argument for physicalism from the causal closure (or causal 'completeness') of the physical world.[11]

---

[9] 'Substance' in her *Collected Philosophical Papers Volume II: Metaphysics and the Philosophy of Mind* (Oxford: Blackwell 1981).

This part of the mind-body problem, then, is a problem about causation: how does the mind have effects in the physical world, given that physical effects seem to be brought about by purely physical causes? And the obvious answer to this is that the mind is a physical thing: the brain. The other part of the mind-body problem concerns the explanation of consciousness: if the mind is a physical thing, how can consciousness be explained? I therefore see the contemporary mind-body problem as a dilemma: if the mind is not physical, then how can it have effects in the physical world; but if it is physical, how can we explain consciousness?[12]

Does this formulation of today's mind-body problem in any way presuppose that the problem be formulated in terms of Cartesian dualism? I don't think so. One way to see why is to consider how little is achieved – in attacking either horn of the dilemma – by accepting or denying Cartesian dualism. On the second horn (the explanation of consciousness): it has long been recognised that it is hardly an answer to the question of how a physical thing can be conscious to say that consciousness inheres in an entirely non-physical thing (even if that thing is something whose essential attribute is consciousness). If the original puzzle was supposed to be with our understanding of how a physical thing can be conscious, no progress is made by saying that consciousness is a property of a mental substance. But maybe the *first* horn of the dilemma is generated by the distinctive nature of mental substance? Jerry Fodor certainly thinks so:

---

[10] For example: 'Since there seems no reason to deny the intelligibility of souls, we affirm their logical possibility', Hoffman and Rosenkrantz, Op. cit. 6.

[11] See David Papineau, *Thinking about Consciousness* (Oxford: Oxford University Press 2002) and Barry Loewer, 'From physics to physicalism' in *Physicalism and its Discontents* Barry Loewer and Carl Gillet (eds.) (Cambridge: Cambridge University Press 2001).

[12] For more on this conception of the mind-body problem, see my *Elements of Mind* (Oxford: Oxford University Press 2001) §19.

> The chief drawback of dualism is its failure to account adequately for mental causation. If the mind is non-physical, it has no position in physical space. How then, can a mental cause give rise to a behavioural effect that has a position in space? To put it another way, how can the nonphysical give rise to the physical without violating the laws of conservation of mass, of energy and of momentum?[13]

The objection here is certainly to Cartesian substance dualism (hence the reference to 'no position in physical space'). And it does seem to be a decisive objection to the idea of causal interaction between mind and body that one is in space and one is not. For how can something cause something else if it has no location? What would explain why it brought about effects at one location rather than another? So perhaps the first horn of the mind-body problem is generated by the assumption of Cartesian mental substances.

If this were true, then denying mental substance would remove the problem. But it clearly doesn't; the problem remains exactly as it was. Suppose one denied that there are any mental substances in the Cartesian sense. If one does not deny mental events and properties, then the causal part of the mind-body problem would remain, since events and properties (and not substances) are normally considered to be the relata of causation. The problem arose because of a conflict between mental causation and the causal closure (or 'completeness') of the physical world. If there are no mental substances, but nonetheless mental causes of some kind (events, properties or facts) then this conflict still arises. A dualist about mental properties or events would have just as much need to respond to the argument as a dualist about mental substances does. Most presentations of the argument see it as an argument against dualism without acknowledging that the essential feature of the dualism in question is that it is a dualism of *causes*, rather than a dualism of substances. And if substances are not causes (as most participants in the debate agree[14]) then the moral is clear: the idea of substance plays no role in causal problem which is the first horn of the mind-body dilemma.[15]

---

[13] Jerry Fodor, 'The mind-body problem' in *The Mind-Body Problem* T. Szubka and R.. Warner (eds.) (Oxford: Blackwell 1994) 25.

One might respond that although the idea of mental substance is not the main generator of the mind-body problem, nonetheless it does not make the problem more tractable. After all, it can hardly help understand how the mind makes the body move by saying that its properties are properties of an immaterial substance, or that mental events are events in which things happen to immaterial substances. This is plausible; but the question I now want to address is whether it is the idea of *mental* substance *as such* which adds this extra difficulty, or whether it is the Cartesian idea of a non-extended (and therefore non-spatial) substance. We first need to ask whether it is the idea of substance which is at fault here, or is it something else? In the next section I shall outline some reasons for believing in substance; in the final section I shall provide some support for the idea that there are mental substances.

3. Substances and non-substances

Some philosophers do think, largely on grounds independent of the mind-body problem, that the idea of substance is one which has had its day.[16] Of course, I cannot hope to embark on a full-scale defence of the idea of substance here. All I can do within the confines of this paper is to try and outline some main elements of an adequate idea of substance, and try to indicate some of the sources of resistance to it. In §2 I dismissed two inadequate yet common ways of thinking of substance. The first was the idea that substance is merely *stuff*, the second is the idea that a substance is a *bare particular*. These ideas are not part of the best conception of substance; so what is that conception?

---

[14] A notable exception is E.J. Lowe. See his 'Event causation and agent causation', *Grazer Philosophische Studien* forthcoming.

[15] It might be objected that fundamental to substance dualism is the idea that the world does not have one kind of explanation, but that fundamentally different styles of explanation are required for mental and physical substances and their effects. Monists (e.g. physicalists) may then argue that the same form of explanation (e.g. subsumption under physical law) applies to mental and physical things, and this is because they are fundamentally the same kind of substance. This does link the rejection of substance dualism to the current debate in an interesting way, and requires further discussion. My basic response is that the driving idea here is the idea of a single kind of explanation, an idea I was expressing in terms of the causal closure of the physical world. I am indebted here to discussions with Mike Martin.

[16] See, for example, Peter Simons, 'Farewell to substance: a differentiated leave-taking' *Ratio* New Series 11 (1998), 253–252; also in *Form and Matter. Themes in Contemporary Metaphysics* D. S. Oderberg (ed.) (Oxford: Blackwell, 1998) 22–39.

What we are interested in here are *individual substances*, what Aristotle called *primary substances*, of which the paradigmatic examples are human beings and animals. (I will not say much about kinds of substance, what Aristotle called *secondary substances*, nor about substance in the sense of stuff.) Individual substances are particulars – unrepeatable individuals, in modern ontological thinking. But not all particulars are substances. Events, on the best understanding of them, are particulars; but they are not substances.[17] Since all particulars are the bearers of properties, being a bearer of properties does not suffice for being a substance. What distinguishes events from particular objects, on the traditional understanding which seems to me essentially correct, is that events have temporal parts or stages and objects do not. In C.D. Broad's terminology, this is the distinction between *continuants* as opposed to an *occurrents*.[18] As David Wiggins puts it:

> An event takes time, and will admit the question 'How long did it last?' only in the sense 'How long did it take?'. An event does not persist in the way a continuant does – that is *through* time, gaining and losing new parts. A continuant has spatial parts. To find the whole continuant you have only to explore its boundaries at a time. An event has temporal parts. To find the whole event you must trace it through the historical beginning to the historical end. An event does not have spatial parts in any way that is to be compared with (or understood by reference to) the way in which it has *temporal* parts.[19]

---

[17] See Donald Davidson, 'Events as particulars' in Davidson, *Essays on Actions and Events* (Oxford: Oxford University Press 1980).

[18] C.D. Broad, *An Examination of McTaggart's Philosophy* (Cambridge: Cambridge University Press 1933) 138.

[19] David Wiggins, *Sameness and Substance Renewed* (Cambridge: Cambridge University Press 2001) 31, note 13.

But the idea of a particular, a bearer of properties which does not have temporal parts, does not yet amount to the idea of a substance. For on the face of it, a pile of stones in a field seems a perfectly good continuant: it is a particular, it has properties, it (arguably) persists through change by remaining the same pile of stones even when one or two stones are removed from it. Likewise, the ball of dust in the corner of my room is a continuant – the same ball of dust can remain in the corner, even as it grows by the accumulation of more dust. But no-one who believes in individual substances would count things like balls of dust and piles of stones as substances. On what grounds, then, should we distinguish substances from other non-substantial continuants?

In the broadly Aristotelian tradition to which the idea of individual substance belongs, an account of individual substances substance involves at least the following three ideas: (i) substances have independent existence; (ii) substances are the bearers of properties or attributes, the subjects of predication which are not themselves predicated of anything else; (iii) substances persist through change. These ideas can be related in the following way: substances are the bearers of attributes; therefore attributes have dependent existence, since they depend on their instantiation in substances; but substances do not depend for their existence on the existence of attributes, since a substance can survive the loss of an attribute and remain the same substance. In other words, a substance has existence in a more fundamental way than an attribute, since it can persist through change – i.e. survive the loss of an attribute – in a way that its attributes cannot survive the destruction of a substance.

There is a lot to be said for this line of thought. But as a way of making the distinction between substance and attribute, it is ultimately unconvincing. For if we have rejected 'bare particulars', then we do not allow that a substance can exist independently of some attribute or other: every substance must have some attribute. But then by parity of reasoning we can say that if we reject uninstantiated universals (as modern

Aristotelians do) then we do not allow that an attribute can exist independently of some substance or other. And just as we say that a particular undergoes change by gaining and losing properties, and thus persists through change, we can equally say that an attribute undergoes change when it changes its instantiation among the various particulars that there are.[20] Neither the idea of substances being the bearers of properties, nor the idea of substances persisting through change, enables us to capture a sense in which substances have independent existence and attributes do not, and thus to distinguish substances from other particulars.

Can the idea of independent existence be employed in some other way to define the idea of substance? 17th century discussions assumed so. Descartes claimed that a substance must be capable of existing independently of all other things: 'by *substance* we can understand nothing other than a thing which exists in such a way as to depend on no other thing for its existence'.[21] He acknowledged that since everything's existence depends on God, therefore God is the only substance in the strict sense (the conclusion famously drawn by Spinoza). But let us follow Descartes in our investigation into empirical substances and put God to one side. What, given this, should we make of this 'independence criterion' of substance?

The important question is, 'independent from what?'. Suppose we take Descartes's lead and say that a substance, properly so-called, is something which is capable of existing independently from all other things. Ignoring independence from attributes for the reasons just given, we should express this as: *independent of all other particulars*. Thus we allow that, if A is a substance, there is a possible world where A is

---

[20] This presupposes that attributes are universals in D.M. Armstrong's sense, rather than tropes or 'abstract particulars': see *Universals and Scientific Realism* (Cambridge: Cambridge University Press 1978) especially volume I. For further discussion of the kind of issue discussed in this paragraph, see E.J. Lowe, *The Possibility of Metaphysics* chapter 6, especially 141-2, and G. Hoffman and J. Rosenkrantz, 'The independence criterion of substance' *Philosophy and Phenomenological Research* 51 (1991) 835-52.

[21] R. Descartes, *Principles of Philosophy* I.51 in *The Philosophical Writings of Descartes* trans. & eds. J. Cottingham *et al* (Cambridge: Cambridge University Press 1985) vol. I, 210.

(tenselessly) the only object. Note the consequences of there being such a 'lonely world'. If it is really possible, then essentialist theses like the necessity of origin cannot be true.[22] For if A is a person, then according to the necessity of origin thesis, A's parents are essential to A's existence. So A cannot exist (tenselessly) in a lonely world. This conclusion seems too strong to be derivable from the definition of substance alone. Why should the mere *definition* of what it is to be a substance rule out these essentialist claims? This is particularly unsatisfactory since many defenders of substance have wanted to defend a form of essentialism too.[23]

Perhaps it could be responded that what matters is not independence from all other things, but independence from all things which are not essential (or otherwise necessarily connected) to the thing in question. But this is going around in a very small circle: we are asking how to tell whether A is a substance, and told that A must be capable of existing apart from certain other things. Which other things? Answer: all those things which are *inessential* to A; in other words, all those things which A is capable of existing without. Suppose that it is true that for any A, there are things which A is incapable of existing without and things which it is capable of existing without. Then to say that A's being a substance consists in it being capable of independent existence from those things it can exist independently of is to say almost nothing at all.

One idea behind the 'independent existence' criterion of substance is that the existence of certain things (say, artefacts) is dependent on a creator, whereas some kinds of thing (say, organisms) do not need a creator to come into existence. So artefacts have a dependent existence where organisms do not. But without wanting to deny the importance of the distinction between organisms and artefacts, the idea of an organism's dependence on its genesis is too closely analogous to an artefact's dependence on its creator for us to be able to use this distinction to distinguish organisms as substances.

---

[22] For the necessity of origin, see Saul Kripke, *Naming and Necessity* Oxford Blackwell 1980, Lecture 3. E.J. Lowe willingly accepts this consequence of the independence criterion in *The Possibility of Metaphysics* Op. cit. 152, but usefully distinguishes between saying that A might have not been born – i.e. might have come into existence without parents, or might have always been in existence – and saying that given that A was born, A might have had different parents. He admits only the possibility of the first of these.

[23] See Wiggins, *Sameness and Substance Renewed* chapter 4.

The idea of independent existence has not got us very far in distinguishing substances from other continuants. A clue that the criterion was not satisfactory was that it failed adequately to distinguish particulars from their properties or attributes. Then we saw that the idea of 'independence of all other particulars' does not allow a doctrine of substance to be compatible with some forms of essentialism; and 'independence of inessential particulars' is a vacuous criterion, which applies to everything. Everything is capable of existing independently of those things it is of which capable of existing independently.

So let us abandon the independence criterion of substance, then. The two other Aristotelian ideas were that a substance is the bearer of properties (the subject of predication that is not predicated of anything else) and that a substance persists through change. But neither will these ideas help distinguish substances from other particulars and continuants. For (i) all particulars, including events, are bearers of properties; and (ii) all continuants (as I am using the term) persist through change. These ideas on their own will not help us to distinguish substances from other continuants. This is not to say that these ideas could not be used as part of the whole story of what characterises substances according to some other conception. But none of these ideas is sufficient.

Rather than abandon the hunt for substance, let us instead focus on the *point* of calling some particulars 'substances'. Here it is useful to consider an important aspect of Leibniz's criticism of Descartes's conception of material substance.[24] Descartes believed that the material world is one substance, and that what we think of as particular objects within the material world are really just modes of that substance. This has the consequence that for Descartes (unlike for Aristotle) a particular dog, for example, is not a substance. Nor is a human body. Leibniz objected that on this Cartesian view, there is no real way of distinguishing between mere aggregates – entities which are unities only because we group them together as such – and the substances which make them up. Consider a flock of birds. We can identify the flock as a continuant – it doesn't have temporal parts, for instance – and we can think of it as the *same flock* even when some birds leave and others join it. But there is a clear sense in which the flock does not have the kind of unity which each individual bird has. The flock is a collection, an assemblage, what Leibniz called an *ens per aggregationem*. Leibniz argued that such aggregates must themselves be made up of things which are not aggregates, otherwise matter would have to be infinitely divisible. And if it were infinitely divisible, then it would be impossible to solve the 'problem of the continuum': i.e. how an infinite number of infinitely small parts can combine to form something of a certain size. This is why Leibniz concluded that there must be simple substances, since there are complexes.[25] Simple substances are monads.

---

[24] See, for example, the criticism in Leibniz's *Discourse on Metaphysics* §12. All page and other references to Leibniz's works in this paper are to the translations in *G.W. Leibniz: Philosophical Texts* R. Woolhouse and R. Francks (eds.) (Oxford: Oxford University Press 1998).

Without wishing to follow Leibniz down this route towards monads, we should take seriously his insight that the Cartesian view of matter has no way of accounting for the distinction between those entities which have a unity in themselves, and those whose unity is the result of mere aggregation. For the unity of certain aggregates, like a pile of stones, is in a certain sense arbitrary, and in a certain sense dependent on our conception of it. There is a sense in which the pile is not a *real unity*, what Leibniz called an *unum per se*. In a letter to Arnauld, Leibniz illustrates this point with the example of bringing together a pair of diamonds:

> the composite which is made up of the diamond of the Grand Duke and that of the Great Mogul can be called a pair of diamonds, but that is only a being of

---

[25] See *Monadology* §§1-3, and 'Principles of Nature and Grace, Based on Reason' §1.

> reason; if they were brought together, that would be a being of imagination or perception, a phenomenon, that is, because contact, shared motion, co-operating in a single design do not change anything in substantial unity.[26]

I propose that the idea of a *unum per se* is what we intend when we say that something is a substance. The notion of a particular I introduced above is a very minimal notion, which can be true of anything which is the bearer of properties and not instantiated by anything (i.e. not a universal). If there is no distinction in nature worth making between particulars like individual birds and particulars like flocks of birds, then there is no point in talking about substances at all. The point of talking in terms of substance, then, is to distinguish those entities which are real unities from those which are only unities because of a relatively arbitrary or interest-relative stipulation on our part, or because of mere aggregation. To understand the unity of a substance is to understand the principle of its unity, the principle which explains why the substance hangs together as it does. Let me illustrate these ideas with two examples, one from early modern philosophy and the other more contemporary.

The first example is from Leibniz's own theory of substances. Anything which is divisible into parts will itself be only an aggregate. So if bodies are divisible into parts, then bodies cannot be substances themselves. This is why, although he began by criticising the Cartesian conception of material substance on the grounds that it could not account for the way in which animal bodies were real unities, Leibniz ends up denying that bodies are substances at all, 'strictly speaking'. As he wrote to Arnauld: 'a body is an aggregation of substances, and not strictly speaking a substance. It must therefore be that there are substances in bodies everywhere, substances which are indivisible, ingenerable, and incorruptible'.[27] From the perspective of position I am trying to arrive at in this paper, Leibniz's position has the (to my mind) unfortunate consequence of denying the original motivation behind the search for a conception of substance: the intuitive need to distinguish between those continuants which have the unity which, say, an animal has, and the mere aggregative unity which a pile of stones or a flock of birds has. If we want to preserve this intuition, then we should reject Leibniz's requirement that substances are 'indivisible, ingenerable and incorruptible'.

---

[26] Leibniz, letter to Arnauld, 30th April 1687.

[27] Leibniz, letter to Arnauld, 23rd March 1690.

Another, equally radical, approach has been proposed recently by Peter van Inwagen.[28] Van Inwagen does not put forward his theory of material objects explicitly as an theory of substance. Rather, he puts forward his theory as an answer to what he calls the 'Special Composition Question': roughly, what is it for the parts of a material object to constitute that object? His answer is that they do so when and only when the activity of these parts 'constitute a life'.[29] ('Life' here is independently understood in a fairly rich biological sense according to which only organisms have lives.) It follows from van Inwagen's account that the only material objects which there are are organisms, and their elementary parts ('simples').[30] There are no artefacts, for example, nor are there things like the moon, stars, stones, fields, countries and so on, and even non-elementary parts of bodies like heads and hearts. Although not expressed as an account of substance, it is easy to think of it in these terms. Van Inwagen sometimes expresses his view in terms of what makes something a unity:

> What is the ground of my unity? That is, what binds the simples that compose me into a single being? It seems to me to be plausible to say that what binds them together is that their activities constitute a life, a homeodynamic storm of simples, a self-maintaining, well-individuated event.[31]

The question is here applied to himself, but the answer applies to all things. The theory of material objects which van Inwagen puts forward counts as objects only what I have been calling genuine unities, and what makes something a unity is that the activity of its parts constitutes a life. So his theory does not only deny that things like flocks of birds and piles of stone are 'real unities'; it denies that they exist at all. Leibniz differs: 'I do not say that there is nothing substantial or nothing but what is apparent in things which have no true unity, because I allow them always as much reality or substantiality as there is true unity in what enters into their composition'.[32] Where Leibniz allows that there are composites, even if they are not substances or true unities, van Inwagen holds that the only composites are organisms and their only parts their simple parts.

---

[28] See especially *Material Beings* (Ithaca: Cornell University Press 1990).

[29] Op. cit. section 9, especially 81-3.

[30] On the reasons why there are simples, see Op.cit. 99.

[31] Op. cit., 121.

I mention these two examples of theories of substances not because I agree with either of them, and nor because I intend to dispute them here. I mention them as examples of theories which take seriously the idea that certain objects (or in van Inwagen's case, the *only* objects) have a kind of unity, which is explained in terms of some fundamental principle. In Leibniz, the unity of a substance is explained partly by its simplicity (indivisibility, incorruptibility); in van Inwagen, it is explained in terms of the idea of a life.

Generalising from these cases, we can draw the following picture. Either substances are simple, or they are composite. If they are simple, then no story needs to be told about what binds them together. This is Leibniz's approach. If they are composite, then – whether or not there are any *other* composite things – some account needs to be given of how their parts combine to make a real unity. This account will either appeal to some independently understood non-substance notion (like van Inwagen's notion of a *life*) or to some principle which explains why substances have the unities they do.

So if we believe in composites, and we believe in the distinction between kinds of composites which I have been trying to defend here, then we need to uncover some principle of unity which explains the manifest unity of a substance. An analogy here with philosophical discussions of natural kinds may be helpful. A natural kind like gold may be considered a large particular, scattered over the whole of the world wherever there is gold. The natural kind *gold* – which is what I talk about here in using the mass noun 'gold' – should therefore be distinguished both from individual pieces of gold, and from the *property of being gold*, which is not a particular but a universal (if there are such things). Gold has certain superficial qualities, some of them literally on its surface (like its colour) and others dispositional characteristics (like its malleability). These qualities are explained by the underlying nature of gold (for example, its atomic number). Something cannot be gold unless it has that underlying nature, and something could still be gold even if its underlying nature resulted in different macroscopic or superficial properties (because, e.g., of changes in surrounding context or other laws of nature). Given the surrounding context and laws of nature, the underlying structure explains the superficial properties of gold.

---

[32] Leibniz, letter to Arnauld, 30 April 1687.

Without commitment to any essentialist doctrines about the essence of species, we might say that an individual substance might have its unity explained by its underlying nature, in an analogous way to the way a natural kind has its superficial properties explained by its underlying nature. An individual animal is a unity because it has a genetic structure, embodied in every cell in its body, which explains in part why it appears the way it does and why it grows and develops in the way it does. The flock of birds or the ball of dust has not such underlying structure which explains why it is one way rather than the other. The explanations of the 'merely phenomenal' unity these things have will be in terms of things extrinsic to the things themselves. The idea in the abstract was well-expressed by Leibniz when he said that 'each one of these substances contains in its nature the law of the continuation of the series of its operations…all its actions come from its own depths'.[33]

Thinking about substance in this way involves returning to some ideas from the history of metaphysics which go beyond today's common conception of what a particular is. If we only have the idea of a particular to work with, then we will not be able to make the distinctions which Leibniz and others wanted to make by using the idea of substance. What we are trying to do, of course, is not to save Leibniz's conception of substance, or Descartes's, or Aristotle's, but rather to dig into these conceptions and try and find out whether there is any *point* to the classification of entities in terms of (anything like) these conceptions, and anything worth preserving, consistent with what we presently know, in these older ideas. I hope I have said enough to show that there is an independently specifiable point to the idea of substance, so that a belief in substance is not something entirely innocuous, nor something absurdly anachronistic. Rather, a belief in substance, in this sense, is a non-trivial doctrine, something worth asserting, and something worth denying.

Who might deny it? I envisage the rejection of substance as coming from (at least) two sources: first, it might be rejected that the things I am calling substances are really continuants, on the grounds that the distinctions between continuant and occurrent is empty and unnecessary. In other words, they might oppose the idea of a continuant with a *four-dimensionalist* ontology of entities with spatial and temporal parts.[34] Or second, it might be rejected on the grounds that the idea that there are any non-*ad hoc* principles of unity is unmotivated, and is undermined by a systematic application of mereology in metaphysics, the formal calculus of parts and wholes, to particulars. We should distinguish between mereology, understood as the formal calculus of parts and wholes, and a metaphysical application of this calculus, a theory which allows the 'composition' of entities out of other entities in a way which does not respect any other principle of unity, other than 'mereological composition'. So an ontology of substance is opposed to (at least) the following two kinds of theory: four-dimensionalism, and a metaphysics of unrestricted mereological composition.[35] A defender of substance has to reject outright these two kinds of theory.

---

[33] Leibniz, letter to Arnauld, 23 March 1690.

[34] The *locus classicus* of this kind of view is W.V. Quine's 'Identity, ostension and hypostasis' in Quine, *From a Logical Point of View* (Cambridge, Mass.: MIT Press 1953).

4. What might mental substances be?

To summarise: the fundamental motivation behind a belief in substance is the idea that there are kinds of particular entity in the world whose existence and unity is not simply a consequence of stipulation, postulation or theory-building. Their unity is rather explained in terms of some underlying natural principle which is responsible for their organisation, activity and boundaries.

Given this way of understanding substance, then what might mental substances be? The general answer is simple: a mental substance is a continuant whose underlying natural principle – what explains its identity as the kind of thing it is, what explains its persistence through time, its being the same thing over time, and what explains its organisation – is mental. Cartesian souls are certainly such mental substances. Their nature is explained in terms of their possessing the essential mental attribute of thought, and their persistence similarly consists in the continued existence of something with modes of this attribute; Cartesian souls are what has thoughts, what persist through change in thoughts, and what survive the death of the bodies to which they are contingently related.

Perhaps it is this kind of conception of mental substance which Putnam has in mind when he rejects the idea that the mind is a thing: the mind has to be the 'underlying substance' which thinks and remembers. The materialist alternative to this, according to Putnam, is to say that the mind is the brain, and that mental states are states of this material substance, the brain. But from what we have said about substance so far, it is not clear that this is what a believer in mental substance *has* to say; and nor is it obvious that a materialist or naturalist philosopher has to say that the underlying substance, or subject of mental predications, is the brain. The notion of substance with the central features which I sketched in the previous section does not imply that the only way something could be a mental substance is either by being a Cartesian soul or by being a brain. A substance, according to that conception, is an enduring particular whose unity is explained by its nature. As I noted, organisms are perhaps the best examples of substances in this sense. But applied to the mental case, it is clear that nothing about this conception of substance requires a materialist to believe that the *brain*, rather than the whole creature, to be the bearer of mental properties. I did employ the analogy with underlying and superficial properties of natural kinds to illustrate the idea of its unity being explained by its nature. But this doesn't mean that the substance is 'hidden', 'inner' or 'underlying' in any problematic sense. (Remember, of course, that we have rejected in §2 the confused conception of substance as something essentially without properties which is essentially the bearer of properties.)

---

[35] David Lewis's metaphysical system is perhaps the best and most sophisticated example of the combination of these two theories. But the theories are independent of each other.

So Cartesian souls are not the only conceivable kind of mental substance. Mental substances must be the bearers of mental properties, but the bearers of mental properties may also be the bearers of other kinds of properties. For why should it not be that there can be substances whose organising principle is mental, but which have some special relationship to a body, something whose organising principle is bodily? It is consistent with the idea that there are substances which have a mental organising principle that they also have bodily features, capacities and a kind of bodily unity too. The result of thinking in these terms would resemble what Descartes called the *substantial union* of mind and body in *Meditation VI*:

> Nature also teaches me by these feelings of pain, hunger, thirst, etc., that I am not lodged in my body, like a pilot in his ship, but, besides, that I am joined to it very closely and indeed so compounded and intermingled with my body, that I form, as it were, a single whole with it. For, if this were not so, when my body is hurt, I would not on that account feel pain, I who am only a thinking thing, but I should perceive the wound by understanding alone, just as a pilot sees with his eyes if any damage occurs to his ship; and when my body needs to drink or eat, I would know this simply without being warned of it by the confused feelings of hunger or thirst. For in truth all these feelings of hunger, thirst, pain etc., are nothing other than certain confused ways of thinking, which arise from and depend on the union and, as it were, the mingling of the mind and the body.[36]

It is an important question in the understanding of Descartes's philosophy to see how this phenomenological insight can be made consistent with his official metaphysics of two substances. But this historical question is not my concern here. What I want to emphasise in this context is the idea of something substantial which involves a 'mingling' of mind and body.

The idea of such a substantial union is strikingly similar to P.F. Strawson's discussion of persons in chapter 3 of *Individuals*.[37] Strawson argued there that we have a primitive concept of a person as something of which mental and bodily predications are made. Persons in Strawson's sense are substances, since persons are continuants and they also have a natural unity. Might it be, then, that a person is a mental substance? What this would mean, according to the present understanding of substance, is that the principle of unity of a person is mental. That is, what would explain the unity of a person at a time is the way the person's mental life is unified, around a single point of view; and what would explain the identity of a person over time is the fundamental connections between the elements of a person's mental life. This is not a reduction of the idea of a person to the idea of a sequence of mental states or events; for there is no way of identifying the mental states and events in question independently of the person whose mental states they are. (This is part of what Strawson means by saying that the concept of the person is primitive.) But the point is that identifying something as a person is identifying something whose nature is essentially mental, something which could not survive the utter absence of all mental organisation.

---

[36] Meditation VI, in *The Philosophical Writings of Descartes* volume II.

[37] P.F. Strawson, *Individuals* (London: Methuen 1959).

It is also part of Strawson's proposal that persons have bodily properties. And this must be right: for it is undeniable that the bodily organisation of a person contributes to its unity. However, this plunges us immediately into the personal identity debate, where it seems possible to separate out the mental and the bodily aspects of persons, and create situations where the same mental unity can remain even though the bodily unity does not. While I cannot hope to resolve this debate here, it is important to distinguish two questions. One is the question of what makes anything a person at all. The Strawsonian answer proposed here is that a person is something with mental and bodily properties. The other question is what makes a person the same particular person over time. Here we have to confront the question of whether a person could be the same even if it changes its body in the various ways described in the personal identity debate. I have no answer to this (much-discussed) second question here, but I would like to conclude by briefly considering the issue of disembodied persons.

In his discussion of persons, Strawson allowed that 'within our actual conceptual scheme, each of us can quite intelligibly conceive of his or her individual survival of bodily death'.[38] Conceding that what is conceivable is possible, this seems to allow the real possibility of the person existing without their body. Commenting on this view of Strawson's, Paul Snowdon remarks that

> Strawson's even-handedness is revealed when he allows that just as a person's body can outlive the person's consciousness, a possibility that is not seriously in

---

[38] Strawson, Op. cit. p.115.

> question, so a person's consciousness can outlive his or her body. This claim is questionable because it seems to be inconsistent with materialism.[39]

Snowdon is surely right that Strawson's view is inconsistent with materialism. But for those philosophers (like myself) who are not concerned to defend materialism, Strawson's concession to non-materialist views is not especially worrying. More worrying would be the suggestion that Strawson's acknowledgement of the possibility of survival after bodily death threatens the idea that persons are substances with a mental and a bodily nature. But what would support this threat? One traditional answer is the 'independent existence' account of substance. For if a person's mental nature could exist entirely independently of its actual body, then by the independent existence criterion, the mental nature would be a substance, and the person's body is only contingently connected to the person.[40] But we have rejected this account of substance; it cannot, for reasons unrelated to the issue of disembodied existence, provide us with an adequate way of distinguishing substances from other entities. So if persons are substances, the possibility of disembodied existence does not show that a person could exist without their body; all it shows is that *something* mental could exist without a body. But it takes further assumptions to show that this 'something' is a person. So if a person is a mental substance which also has a bodily nature, then the fact that a mental life without a bodily nature is possible does not itself show that persons can be disembodied; it just shows that a mental life could exist without a body. And if we reject the independence criterion of substance, then we do not have a reason to think that a mental substance can exist without its body.

How does this relate to the idea with which we started, that the mind is not a thing? In a sense, our reflections have led us to a similar conclusion to Putnam's: the *mind* is not a mental substance. If anything is a mental substance, the person is. Persons are not minds; for persons have bodies and minds do not. Having a mind is having certain mental capacities: the capacities for thought, sensation, imagination, perception, will, appetite and action. These capacities are distinctive of the kinds of substances which persons are, substances which also have a bodily nature. This is the fundamental reason to call persons mental substances. And if this way of understanding idea that persons are mental substances is at all appealing, then we must address the personal identity debate from this perspective.

---

[39] Paul Snowdon, 'Persons and personal identity' in *Essays for David Wiggins: Identity, Truth & Value*, S. Lovibond and S. Williams (eds.) (Oxford: Blackwell 1996) 33.

[40] This is the consequence drawn by E.J. Lowe, *The Possibility of Metaphysics* Op. cit. 172.