

# Persons

*Human and Divine*

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and  
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CLARENDON PRESS · OXFORD

OXFORD

UNIVERSITY PRESS

Great Clarendon Street, Oxford OX2 6DP

Oxford University Press is a department of the University of Oxford.  
It furthers the University's objective of excellence in research, scholarship,  
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Oxford New York

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New Delhi Shanghai Taipei Toronto

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Published in the United States  
by Oxford University Press Inc., New York

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First published 2007

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British Library Cataloguing in Publication Data  
Data available

Library of Congress Cataloguing in Publication Data  
Data available

Typeset by Laserwords Private Limited, Chennai, India  
Printed in Great Britain  
on acid-free paper by  
Biddles Ltd, King's Lynn, Norfolk

ISBN 978-0-19-927750-6  
ISBN 978-0-19-927751-3 (Pbk.)

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# A Materialist Ontology of the Human Person

*Peter van Inwagen*

I will begin by setting out a metaphysical position that is so abstract that it hardly deserves the name ‘position’. (Perhaps it would be better called a ‘metaphysical framework’.) This very abstract position constitutes the metaphysical perspective from which I view all philosophical problems, including those problems that pertain to the human person. If you think this perspective is skewed, you will not find much to agree with in what I am going to say about the ontology of the human person.

The most general metaphysical category is the category “thing”. I use ‘thing’ as the most general count-noun. Everything is a thing. A thing is anything that can be referred to by a third-person-singular pronoun—as when I say, “The following is true of everything, that it is identical with itself.” The category “thing” comprises everything there is, everything that exists (for I take a stern anti-Meinongian line about non-existents: non-existents simply don’t exist: the number of them is 0).

Things divide into two sub-categories, the concrete and the abstract. If there are such things as the following, they are concrete: cabbages, kings, bits of sealing wax, electrons, tables and chairs, angels, ghosts, and God. I myself believe in only some of the things in this list: cabbages, kings, electrons, angels, and God. But I am quite certain that if there were bits of sealing wax, tables and chairs, and ghosts, they would be concrete things. Here is a list of abstract things: propositions, possibilities, sentence-types, sets, properties or attributes, numbers, novels (as opposed to tangible copies of novels), theories, and such miscellaneous items as the key of F-sharp minor, democracy, and the literary form *the epic poem*. I am not sure which of the things in this list I believe really exist (I certainly think some of them do), but I am quite certain that if there is such a thing as, for example, the key of F-sharp minor, it is an abstract thing.

How can we understand this distinction? (That is to say, how can we provide an *explicit statement* of the distinction marked by the words ‘abstract’ and ‘concrete’, for, in my view, it is a real distinction and one we can grasp simply by attending to lists of examples. Some philosophers, of course, doubt whether there *are* any clear ideas associated with the words ‘abstract’ and ‘concrete’.) Can we provide

a useful definition of either ‘abstract’ or ‘concrete’? (If we could define either, we could define the other as its complement.) Well, I’m inclined to think that if someone says, “A thing is concrete if and only if it has causal powers”, that person says something true. But I’m not satisfied that this counts as a definition. One reason, of course, is that the concept “causal powers” needs a good deal of philosophical work. But I see, or think I see, a deeper difficulty: it seems to me that although concrete objects, one and all, have causal powers, and abstract objects, one and all, lack causal powers, this is a fact that an adequate definition of ‘concrete’ and ‘abstract’ ought to *explain*. To define a concrete object as an object that has causal powers seems to me, at least in some moods, to be like defining a “word” as a thing that can be spelled correctly or incorrectly. This definition of ‘word’ does, I suppose, give ‘word’ the right extension, but one feels that it touches on a rather peripheral feature of words: a definition of ‘word’ should be such as to explain why words and words alone are things that have spellings. I am therefore not going to offer ‘has causal powers’ as a definition of ‘concrete’ object, for I feel somehow that the no-doubt-true statement ‘A thing is concrete if and only if it has causal powers’ doesn’t get at the essence of what it is to be a concrete object; I think we are able to grasp this essence by considering any reasonably comprehensive list of types of concrete object and proceeding to perform some sort of act of abstraction that enables us to see what the common feature of things in the list is. But I doubt whether we are able to articulate the essence we grasp in this act of abstraction. And here is a perhaps related problem that faces us if we understand ‘abstract object’ as ‘object that has no causal powers’. This definition is purely negative: it represents the concept “abstract object” as the concept of a kind of thing that does *not* have a certain property and tells us absolutely nothing about what properties these things do have—beyond, of course, the property *not having causal powers* and its logical consequences. Suppose it had never occurred to anyone that phrases like those in my list of examples of abstract objects were denoting phrases. If some philosopher were to introduce the concept “thing lacking causal powers” into some metaphysical discussion, that would probably suggest to his audience that he had in mind some ghostly sort of thing that could drift about in space and pass through material objects without affecting them or being affected by them. No one, surely, would react by saying anything like, “If there were objects that had no causal powers, that could only be because words and phrases like ‘wisdom’ or ‘the proposition that snow is white’ had referents; objects without causal powers would be the referents of phrases like that.” It seems, therefore, that one could have the purely negative concept “having no causal powers” without having the concept “abstract object”.

Now the metaphysical position or framework I promised you. First, there is only one kind of concrete object: that which has traditionally been called “substance” or “individual thing”. And there is only one type of abstract object. I will call this one type “relation”. I will first expand on this second statement. Among relations there are 0-term relations, or propositions, 1-term relations

(also called properties, attributes, qualities, features, characteristics . . .), and 2-or-more-term relations, which I will call ‘proper relations’ (on the model of proper fractions and proper subsets). I will not discuss proper relations. I will, however, say something about propositions and properties. Propositions are things that have truth-values. They are things that can be *said*—that is, *asserted*. They are things that can be assented to or denied. (For most propositions, these descriptions are true only in principle, at least as regards human beings. Most propositions are too complicated to be assented to or denied by any human being. The same “true only in principle” qualification will be needed at various points in the sequel. I’ll leave it you to supply it.) Properties, by contrast, are things that can be *said of* or *about* something (whether truly or falsely); that it is white, for example. That it is white is one of the things you can say truly of the White House, and you can say it truly of the Taj Mahal, too. But you can’t say it truly of the Eiffel Tower or the key of F-sharp minor; you can, in fact, say it only falsely of these objects, for each is non-white. A few properties have traditional names that are, as the linguists say, perfect nominals: ‘whiteness’, for example, or ‘wisdom’. In my view, ‘wisdom’ is a name for what we say *of* or *about* Solomon and the Cumaean Sibyl when, speaking with reference to them, we say, as appropriate, ‘He is wise’ or ‘She is wise’. But most properties have no such names: one of the things we can say of something is that it is one of the daughters of the forty-third President (we could say this truly of exactly two things; if we said it of Chelsea Clinton or the Eiffel Tower or the number of planets, we’d be saying it falsely of those things). And this property, a perfectly good example of a property in my view, has no one-word name. Typical properties (and, more generally, typical relations) are, as ‘whiteness’ and ‘wisdom’ and our more complicated example testify, universals, for, typically, a property can be said truly of—or, to use some more usual idioms, can belong to, be had by, be instantiated by, be exemplified by—two or more things. Not all properties have this feature, however, for there are plenty of things that can be said truly of only one thing (that it is a daughter of the forty-second president; that it is an even prime), and plenty that cannot be said truly of even one thing (that it is a woman who served as President of the U.S. in the twentieth century; that it is both round and square). I thus come down on the side of platonism, as opposed both to nominalism and Aristotelianism. And a very capacious platonism it is. I’d *like* to say that to every meaningful open sentence there corresponds a property, but you probably know why I can’t say that. I have to admit that Russell’s paradox forces me to confront a mystery: it seems that one of the things you can say about something is that it is a thing of the sort that can be said of things and can’t be said truly of *itself*. But it can’t *be* that there is any such thing to say about things, despite the fact that one can say truly of wisdom that you can’t say it truly of itself, and can say truly of whiteness that you can’t say it truly of itself. And *that* certainly looks for all the world like a case in which one and the same thing can be said truly both of wisdom and of whiteness. Well, I’m a metaphysician and am inured to mystery.

It should be evident that properties, as I use the term, are as abstract as anything could be. They can in no way be “constituents” (whatever that might mean) of concrete objects. If there are such things as “tropes” or “immanent universals”, they are not properties or any other sort of relation. And, since, in my view, there are only substances and relations, there are no tropes or immanent universals. I don’t mind this consequence, for, as far as I can see, the term ‘trope’ (as used by philosophers), and the term ‘immanent universal’ are perfectly meaningless. Another perfectly meaningless term—this one over on the “concrete” side of things—would be ‘bare particular’. A bare particular would either be what you get when you subtract the tropes from an ordinary concrete object (and thus the term would be meaningless) or else a thing of which nothing is true; and of course, the idea of a thing of which nothing is true makes no sense at all.

One final point about propositions and properties and other abstract objects. They are not among the *invisibilia* that are mentioned in the Nicene Creed. With the possible exception of those abstract objects that in some way “involve” concrete objects (such as “impure” sets and, perhaps, propositions that predicate properties of particular individuals), they are eternal and necessary and hence uncreated. The *invisibilia* that we Christians must not believe to be uncreated are those “unseen” things that have causal powers. (As far as we know, all these things are persons, and, more specifically, angels of some sort. If there are impersonal *invisibilia*, we have not been told about them.) Those who want to say that the doctrine of God’s sovereignty implies that he must somehow be the creator of such things as the proposition that snow is white are, to borrow words Whitehead used for another purpose, paying God an ill-judged metaphysical compliment.

I should like to be able to say something useful about substances or individual things. But I can’t, not really. Of course it follows from what I have said that substances have causal powers and that anything that has causal powers is a substance. But this statement will not be of much help to anyone who wants to know what a substance is. You might of course want to dispute even this unhelpful statement. You may think that there are things that have causal powers but shouldn’t be called substances. If you do, I’ll have to ask you what they might be. Tropes? There are no such things. Surfaces? There are no such things. States? *Either* there are no such things or they are some sort of property and thus lack causal powers. Social entities like baseball teams and corporations? I don’t know what to say about them, other than to remind you that hard cases make bad law. (I don’t mean that I can’t think of any way to fit social entities into my ontological framework; I mean I can think of lots of ways to fit them in, and am not sure which is the best.) Stuff? Well, stuffs are worthy of discussion, but such discussion wouldn’t be germane to what I’m going to talk about. Let’s just say that if some metaphysician convinced me that I had to add stuffs to my ontology, the addition wouldn’t affect anything I’m going to say. Events? Ah, that’s a very good question.

Events constitute one of the main challenges to the adequacy of my ontological framework. Our discourse obviously contains many sentences that on some

understanding or analysis must express truths and which apparently refer to and quantify over events. I must somehow take account of this fact, and, it would seem, in one of four ways. (1) I might try to show that all true statements that apparently imply the existence of events can be paraphrased as statements solely about the changing properties of and changing relations among substances; (2) I might try to show that events can be understood as substances (of some special sort); (3) I might try to show that events can be understood as properties (of some special sort); (4) I might concede that my ontological framework needs to be expanded and say that there are two sorts of concrete object, substances and events; (5) I might concede that my ontological framework needs to be expanded and say that there are two sorts of abstract object, properties and events. I am not at present clear which of these options I should choose, or even which of them is the most promising. I hope that I shall one day be able to “paraphrase events away” (option 1), but I admit that I have not yet given any serious thought to this project. And I am certain that option 2 is a non-starter (I have included it in the list of options only for the sake of logical completeness). Beyond this, I am forced to admit that I do not know what to say about events. I wish I did, because, while I was writing this essay, I discovered that an important question in the philosophy of mind turns on the question whether there are events. Not an absolutely fundamental question, but one of some significance. In this paper, I’ll have to content myself with saying what this important question in the philosophy of mind that turns on the question whether there are events is. This I will do when I discuss the identity theory.

An incidental remark: the fact that I am not sure what to make of events has another consequence, a purely metaphysical one. Because of my uncertainty about the existence and nature of events, I cannot follow Aristotle and define a substance as a thing that has properties but is not itself a property—for events, if such there be, may have properties and yet not themselves be properties. (The same point, of course, could be made in relation to stuffs.)

Here ends my description of the metaphysical framework that underlies my discussion of the philosophy of mind. Let’s now turn to you and me, to us human persons. How do we fit into this framework? Well, obviously, we’re not relations. True, some philosophers seem to think we’re something like a computer program, and a computer program, in my metaphysic, is probably some sort of relation. But I have a hard time believing this is really what these philosophers mean to say, and if they do mean to say this we can ignore them. Whatever I am, I’m a lot more like a poached egg or a waterfall or a hydraulic jack than I am like a computer program; one should therefore take the thesis that I’m a computer program less seriously than one would take the thesis that I’m a poached egg, and that’s not very seriously.

If we exist at all, we’re substances. Now some philosophers think we don’t exist at all. Perhaps it suffices to point out that if they’re right, then it’s false that some philosophers think we don’t exist at all. Their thesis is thus either false

or such that no one holds it. And I'm not going to waste my time and yours discussing a thesis that's either false or held by no one.

Perhaps this is as good a point as any at which to mention the "self". (There isn't any *very* good point.) Some philosophers say things like this: that modern neurobiology has exploded the old myth of the self or that the self is a social construct or that Descartes was mistaken in thinking that a sharp boundary could be drawn between self and world. When I hear philosophers say things like this, the first thing I always ask them is whether, when I use the word 'I' I refer, or at least am attempting to refer, to one of the these "selves" (my own, of course). After all, if there are selves and if, when I use the word 'I' I refer to something, it would seem that it must be my Self I refer to. Or if there is such a thing as my Self, and I do *not* refer to it when I use the word 'I', how could it be correct to call this thing my Self? It is not I, it is rather something numerically distinct from me, and how can something that is not I be properly called my Self? Or, if the philosophers I am talking to are of the party that holds that selves are myths, I ask them whether their position is that they do not exist—for if they exist, then, of course, each time one of them uses the word 'I', that use refers to something, and what could that referent be but the self of the speaker? These questions may seem to some to be trivial quibbles on my part, but they are no such thing. They confront the philosophers who talk of selves with a dilemma I have never seen satisfactorily resolved. If they say, "Yes, that's just what your Self is (or that's just what it would be if there were such a thing): what you refer to when you say 'I,'" then their theses almost invariably turn out to be nonsense or obviously false or so obviously true that it is hard to think why anyone would bother stating them. (Modern neurobiology has obviously not shown that there are no such things as you and I.) Or, if they say, "No, that's not what your Self is—your Self is not you but something numerically distinct from you; it is [or 'is supposed to be'] something you *have*; it's not what you *are*," then they are never able to give any real explanation of what they mean by 'self': their attempts at explanation turn out to be so much semantical arm-waving. Let this suffice for a discussion of the "self".

We are, I contend, substances. What sort of substances? Well, either material or immaterial substances. (Grave difficulties confront the philosopher who proposes to define 'material' and 'immaterial'. In this essay, I will ignore these problems.) Or so it would seem. But there is a sort of alternative.

St Thomas Aquinas, as every schoolman knows, teaches that we are some sort of union or amalgam or compound, of a material and an immaterial substance; and such a union could not be classified as either material or immaterial. But the form the position takes in his work scarcely seems coherent. Thomas thinks that I am a union of my soul and my body, the former being an immaterial substance and the latter a material substance. So far, this is fairly plain sailing. But Thomas also thinks that the soul is the *form of the body*. I do not see, and no one has ever been able to explain to me, how something that is the form of a substance

can also be a substance. It seems evident to me that the phrase ‘the form of my body’ must either strictly speaking denote nothing (that is, although this phrase can appear in meaningful and true sentences, it will, “disappear on analysis”: for example, the true sentence, ‘The form of my body remains constant as long as I remain alive’ expresses something that could be more perspicuously expressed by some such words as ‘The formal features of my body do not change as long as I am alive’) or else must denote some abstract object, some very complex property I have throughout my existence, or some very complex variably polyadic relation that at every moment of my existence then holds among the particles of matter that at that moment compose my body. In the former case, there is, strictly speaking, no such thing as the form of my body. In the latter, the form of my body is an abstract object, and there is no such thing as an amalgam of my body and it—just as there is no such thing as the amalgam of Michelangelo’s *David* and the property (a property of thousands of other statues and billions of human beings) *being shaped like a human being*. How could there be an amalgam of two things, one of which was a statue and the other of which was something that you could say about a statue? (Here’s another difficulty I see in Aquinas’s position: wouldn’t the union of my body and the form of my body, whatever the form of my body may be, be simply my body? And isn’t my body, without qualification, a material substance? Or is this the same difficulty, viewed from another angle?)

Could something like Aquinas’s view, but minus his account of the nature of the soul, be correct? Suppose my soul is a true immaterial substance à la Descartes and my body is a material substance à la, once more, Descartes. Could it be that, *pace* Descartes, I am not identical with *one* of these things (the immaterial one), but am rather a union or amalgam or whole that somehow comprises both of them—and am thus neither a material nor an immaterial substance?

There would seem to be modal problems with this position (call it Cartesian unionism) that do not face orthodox Cartesianism. If Cartesian unionism is true, I am not the immaterial thing that Descartes calls my *mens* or *anima*. Suppose my body were annihilated and no new body replaced it. What would happen to me according to Cartesian unionism? Only one answer is possible: I should cease to exist, for, now that my body has been destroyed, there is no candidate for the office “I” but my *mens*, or the *mens* that was formerly mine. And my *mens* can’t be I, since it used *not* to be I—and, as we all know nowadays (I hope we all know this), if  $x$  is not identical with  $y$ ,  $x$  is necessarily not identical with  $y$ . But what then is the *point* of Cartesian unionism? It seems to be a way of combining the disadvantages of orthodox Cartesian dualism (interaction problems, for example) with the disadvantages of materialism (the implication of materialism that I cannot survive the corruption of my body). In short, if you are a Cartesian unionist, why not become an orthodox Cartesian? And, anyway, isn’t it just evident that if at present my thoughts consist in a sequence of alterations (in the abstract metaphysical sense: changes in the properties of) in a Cartesian immaterial substance, and if that sequence of alterations goes on in the same sort of way following the

annihilation of my body, I shall continue to exist? More might be said about Cartesian unionism, but I won't say it. I have mentioned Cartesian unionism only for the sake of logical completeness. As far as I know, no one *is* a Cartesian unionist, and I don't propose to discuss at length a position no one holds.

Our exploration of the thesis that I might be something other than either a material or an immaterial substance (namely, the union of a material and an immaterial substance) seems to show that this is not a viable alternative to Cartesianism and materialism. There are, therefore, only two possible metaphysical accounts of the human person (that is, two accounts of what we refer to when we say 'I'): a human person, a human "someone", is either a material substance or an immaterial substance.

I myself believe that we are material substances. I am therefore in one sense of the word a materialist. I am, as one might say, a local materialist. I oppose local to global materialism. A global materialist believes that everything (or every concrete thing) is material. I am not a global materialist, since I believe that God exists and that God is neither material nor abstract (and no doubt angels, in which I also believe, are concrete things that are not material). A local materialist is a philosopher who is not a global materialist but who believes that all objects of some particular sort are material—where that "sort" is a fundamental philosophical category and is such that the objects it comprises have been widely held to be immaterial. In my case, the sort or fundamental metaphysical category is "human person". I believe that human persons are material objects (living human organisms), and that they have no part or aspect that is in any way immaterial.

In my book *Metaphysics*, I presented some arguments for the thesis that we human persons are material substances. These arguments convinced no one. Imagine my astonishment. It is not my intention on this occasion to re-hash the arguments for materialism I have already presented or to present new arguments for this conclusion. (But I'll remind you of one of my *theses*: it may be difficult to see how it's possible for a material thing to think and feel, but it's equally difficult to see how it's possible for an immaterial thing to think and feel.) I want, rather, to discuss various logical and metaphysical confusions into which a great many of my fellow materialists have fallen. For I have to admit that I haven't seen much logical and metaphysical confusion, much sheer *confusion* (as opposed to error; since I disagree with them I am of course committed to thinking they are in error), in the writings of dualists, and certainly not confusions that infect their central positions. There is one major exception to this generalization: John Locke, to whose views I shall turn in a moment, is a very confused dualist indeed. But logical and metaphysical confusion among the materialists amounts to a pandemic. As I lay out the metaphysical confusions into which, I believe, many materialists have fallen, the features of an "unconfused" (by my lights) materialist ontology of the human person will emerge.

One confusion that is very common among materialists, and which I have discussed in print, is inherent in the view that it is possible to be a materialist

and to accept a psychological-continuity theory of personal identity. But this confusion does not really have any essential relation to materialism. It is a special case of a more general confusion, the confusion that attends the thesis that it is possible consistently to believe that we are *substances* (material or immaterial) and to accept a psychological-continuity theory of personal identity across time. This was precisely the confusion of John Locke to which I alluded a moment ago. Locke believed that we were immaterial substances *and* accepted a psychological-continuity criterion of personal identity (more specifically, a memory criterion). Accepting both these theses led him to the absurd view that it is possible for one to switch souls. (I model this phrase on the more common phrase “switch bodies”.) More exactly, it led him to the impossible view that one and the same person could be identical with one immaterial substance today and with another tomorrow, an evident violation of the principle of the transitivity of identity—and hence a violation of the principle of the indiscernibility of identicals, of which the transitivity of identity is an immediate logical consequence. As far as I know, no other dualists (and, for that matter no idealists) have got themselves into any such logical incoherency as this. Plenty of materialists have, though: just those materialists who think that we human persons really exist (who are not willing to dismiss us as some sort of grammatical fiction) and who accept any sort of psychological-continuity criterion of personal identity. One simple argument for this conclusion is this: any materialist who accepts a psychological-continuity criterion of personal identity must concede that it is possible for a person to *switch bodies*—and in a way not involving the transfer of anything material to the new body from the old body: simply in virtue of the transfer of information present in the brain of one body to the brain of the other body. But such a case of “body switching” or “bodily transfer” would be a case of someone’s being identical with one material substance at one time and with another material substance at another time. And the principle of the indiscernibility of identicals tells us that can’t happen: for the reality of any body switch, together with the principle of the indiscernibility of identicals, must entail a contradiction. (For example, that a certain person both has and lacks the property of once having been bald, or that someone was once in Room 101 and has never been in Room 101.)

Now having said that materialists who accept a psychological-continuity theory of personal identity must fall into a contradiction, I must qualify my statement. (There’s the bit where you say it and there’s the bit where you take it back.) Perdurantists can avoid the contradiction. Adherents of relative identity can avoid the contradiction (although I have not heard of any of them who wants to accept a psychological-continuity theory of personal identity). Can anyone else? Is it possible to avoid it without committing oneself to a very strong metaphysical thesis like perdurantism or to a very unorthodox logical thesis like the relativity of identity? (Of course there’s nothing *per se* wrong with accepting strong metaphysical theses or unorthodox logical theses, but I don’t think it’s worth becoming a perdurantist or a believer in relative identity *simply* to be able consistently to

subscribe to a psychological-continuity criterion of personal identity; if perdurantism doesn't recommend itself to one on grounds independent of the philosophy of mind, one should say that the price isn't worth it—and, of course, the same point applies to the relativity of identity.) Sydney Shoemaker has tried to avoid the contradiction by embracing the thesis that we persons are neither substances nor grammatical fictions but some intermediate sort of thing. Baseball teams and corporations are his supposedly philosophy-of-mind-neutral examples of things having this intermediate ontological status. (Or rather, of things having this *lesser* ontological status, for grammatical fictions are not really *there* to have any sort of ontological status.) According to Shoemaker, baseball teams and persons really exist and are really material objects and really have causal powers, but they are not substances; they therefore are importantly different from tables and chairs and cats and human bodies, which *are* substances. I have examined Shoemaker's views in detail elsewhere. Here I will say only that the possibility of there being something that really exists and really has causal powers but is not a substance seems to me to be a flight of metaphysical fancy. The only way for a thing to avoid being an abstract object is for it to be a substance. As I said a while ago, I am not sure what line to take about the referents of phrases like 'the New York Yankees' but the right thing to say about their referents must be this: either such phrases have (in the strict and philosophical sense, as they say) *no* referent; or their referents are substances; or their referents are abstract objects. There is no other way for an ostensible denoting phrase to be related to the world—and there's an end on't.

A second confusion or family of confusions endemic to the writings of materialists is evident when one considers their attempts to answer the question, What is the relation between the mental and the physical? I will not discuss those materialists who deny the existence of the mental—eliminativists or old-line behaviorists. As Jerry Fodor has said, it's one thing to throw the baby out with the bath-water; it's another to throw out the baby, the bathtub, the washbasin, the toilet, and the bathroom walls and ceiling and floor with the bath-water.

Almost all materialists who accept the reality of the mental accept some form of the so-called token–token identity theory. I want to examine this thesis. What is it that, according to advocates of the token–token identity theory, is identical with what? In my view, attempts to answer this question have engendered widespread confusion. According to most statements of the identity thesis, various items picked out using mental language are said to be identical with "brain processes" or "brain states". But what items, exactly? All sorts of phrases, some of them drawn from everyday language and some of them philosophical inventions, figure in proposed answers to this question. Some of these phrases are meant to be very general and to cover all cases or large classes of cases, and some of them are meant only to serve as examples of special sorts of thing that are identical with brain processes or brain states. Mental states and mental processes, qualia, sentences in the languages of thought, experiences, pains, afterimages, . . . In the case of the more general terms, and this is especially true of the terms 'qualia' and 'mental

state', it is very rare for materialists to take much trouble over the question what these terms are supposed to mean or what ontological categories their referents are supposed to fall into. I will remark that the terms that figure in the other side of the equation are not much better explained. I think that, in particular, the term 'brain state' could do with a lot of explanation.

Again I ask: what it that, according to the identity theory, is identical with what? I can see only one answer to this question that has any hope of making logical and metaphysical sense: *mental changes* in a material substance, in a physical thing, are, one and all, identical with *physical changes* in that substance—that is, the class of mental changes in a substance are a subclass of the class of physical changes in that substance. But what are mental and physical changes? To answer this question, we need some ancillary definitions.

By a material substance or physical substance, I mean a substance that is composed entirely of elementary particles. (That is to say, a substance each of whose parts overlaps an elementary particle.) Physical changes in a material substance are rearrangements of and interactions among the elementary particles that are its ultimate parts. (I say "its ultimate parts" because I take elementary particles to have no proper parts. But nothing I want to say turns on whether this is indeed so.) By a mental change in a material substance, I mean a change in that substance's mental properties. By a mental property, I mean a property such that, of necessity, if a thing has it at a time, that thing is then either thinking or feeling something. Consider, for example, *that he, she, or it is considering buying a new car*, a thing that can be said truly of lots of people; or consider *that he, she, or it is in pain*, a thing that can (unfortunately) be said truly of lots of sentient creatures. These two properties are mental properties, properties whose more usual names would be something like "considering buying a car" or "being in pain". The materialist who is not an eliminativist or behaviorist will agree, I think, that the material substances who are ourselves have mental properties (at least when they are not in a coma or a deep dreamless sleep), and that at least some mental properties are intrinsic properties. (If Putnam and Kripke are right, some mental properties are relational properties. But it seems evident that there could be no relational mental properties if there were no intrinsic mental properties.) A material substance or physical thing changes mentally when its intrinsic mental properties change. The identity thesis, finally, is that each human person is at any time composed entirely of elementary particles, that the material substances that are human persons have intrinsic mental properties, and that every *change* in the intrinsic mental properties of a material substance is identical with a rearrangement of or an interaction among the elementary particles that compose it.

The identity thesis, so stated, requires its adherents to believe not only in material substances and properties—material substances and abstract, eternal, necessarily existent universals but in changes—that is to say, in events. Advocates of the identity thesis must believe in events each of which is both a change in the intrinsic mental properties of a material substance *and* a rearrangement of or

interaction among its constituent elementary particles. If, as I'd prefer to think, there are no events, if there are only substances and relations, then there is no thesis that can properly be called the identity theory. A thesis properly called the identity theory must, obviously enough, assert that something that is in some sense physical is identical with something that is in some sense mental, and if there are no events, I maintain, nothing that pertains to human persons is in any sense mental. Now you may want to suggest to me that if there are, as I maintain, properties, then there is obviously something that is in some sense mental, for there are mental properties. I will make two points in reply. First, mental properties are after all properties: they are abstract, eternal, necessarily existent Platonic objects. We call them "mental" properties because a thing that has them thinks and feels, but they would exist even if nothing thought or felt: they would exist in worlds from which thought and consciousness were entirely absent. Therefore, although I call them mental properties, they are no more mental things than physical properties (such as *that it weighs 60 kilos*) are physical things. This is a point to which I shall return when I discuss "property dualism". My second point is this. If one says that mental properties are identical with physical properties, one is no doubt expressing some form of what is called the type–type identity theory. The point I am trying to make, however, is really a point about the so-called token–token identity theory: my thesis is if there are no events, then there is nothing mental for the token–token identity theorist to identify with something physical.

If there are no events, I contend, there is nothing mental. And yet I am not saying that if there are no events the eliminativists or the behaviorists are right. If there are no events, I contend, the mental is nevertheless real. For, even if there are no events, it is nevertheless true that some things think and have feelings. They really do have those properties. That they have those properties is as real and objective a feature of the world as anything is. If there are events, I contend, there are mental events. But, I say, there are certainly none of those *other* things that, according to most advocates of the identity thesis are identical with some physical item. Even if there are mental events, I say, there are no pains, no qualia, no orange after-images, none of the things that have been said by so many philosophers of mind to be the referents or extensions of the terms and predicates of mental language. (There may be such events as the onset of an after-image or someone's coming to be in pain, but there are no after-images or pains.) I want to try to make it clear what I am saying when I say this, for I find that I am liable to be misunderstood. Let me take you through a particular case, a particular mental episode, in detail. (An unusual one, I concede, for it will involve the evil genius. But he's a very useful piece of conceptual apparatus, and I make no apology for his presence in the illustrative story I'm going to tell.)

Suppose Sally, whose perceptual apparatus is normal in every respect, is examining (under conditions favorable for color-perception) a piece of turquoise—the color of which is, of course, called 'turquoise'. The words 'It is turquoise' could

be used to say either of two things about this object (both of them true): that it is made of a certain mineral, *or* that it is of a certain color. The evil genius suddenly removes from the world all physical things that are turquoise in color, including, of course, the piece of turquoise Sally is examining; but, plying his time-honored philosophical trade, he causes her sensations to be just what they would have been if he had not done this. Is there then anything that is turquoise (in color)? I would say no, but some would say yes: there is, they would say, a quale immediately present to Sally's conscious awareness that has the property *being turquoise in color*. Now some of these philosophers will hasten to add that the quale is not turquoise *in the same sense as* the piece of turquoise that was there a minute ago. The color-properties of qualia, they will tell us, are different properties from the color-properties of material things, although in ordinary speech we pair them and use the same name for each member of the pair—a feature of our usage that is responsible for the fallacy or mistake or confusion called *naïve realism*. But they will insist, there is a property “being turquoise in color” that belongs to qualia, even if there is a distinct property that goes by the same name and belongs only to physical objects. (Berkeley, will of course, tell us that if, *per impossibile*, there were both these properties, only the property of qualia could properly be called a color.) These properties of qualia were called phenomenal properties when I was in graduate school. I don't know whether they're called that still, but, whatever you call them, I can't make out what they're supposed to be because I don't understand what these qualia are that they're supposed to be properties of. When the evil genius annihilates everything turquoise and causes Sally's state of perceptual awareness to continue unchanged from the way it was a moment ago when she was examining a piece of turquoise, his manipulations and deceptions have left nothing there but Sally. At any rate, there is nothing *concrete* there but Sally. We can if we like say that there are certain properties there, although saying of a place that a certain property is at that place is to say something of dubious significance. No doubt someone who talks that way means only that something at that place has that property. When I say that Sally's state of perceptual awareness is just the way it was a moment ago (or that her sensations are as they were a moment ago) when she was examining a piece of turquoise, I am saying that she has many of the same mental properties as she did then. I am saying that many of the things that were true of her then are true of her still. What else could I be saying? And in saying this I imply the existence of nothing but a substance (in my view a material substance) and some properties, properties she, the material substance, has. These properties are, to be sure, mental properties, but that means only that if they are true of or belong to something at a moment, that thing is thinking or feeling at that moment. A parallel definition of ‘physical property’ would be: a property is physical if its being true of something implies that that thing is a physical substance. A physical property, therefore, is not a property that has the property *being physical*, which is a property no property could have. To call a property physical is to speak not of *its* nature but of the

natures of the things it could possibly be true of. We call a property physical not because it *has* the property *being physical* but because it *entails* that property. And all these points apply, the appropriate changes being made, to mental properties. To call a substance a mental substance is to say something about its nature; to call a property a mental property is to say something about the natures of *other* things, the things it is possible for it to belong to. Both mental and physical properties are abstract, Platonic sorts of things; just as the terms “novel” and “history” do not represent ontologically significant subcategories within the category “book,” so the terms “mental property” and “physical property” do not represent ontologically significant subcategories within the category “property”. I will return to this point when I discuss the thesis called property dualism.

Now *what* mental properties continue to be true of Sally when the evil genius performs his cosmic conjuring trick? Well, the most important one for our purposes, the one that is, so to speak, operative in the example, is rather hard to express; at least it is hard to express it in a form that does not have misleading implications. We might call it “seeing turquoise”, but this phrase makes the word ‘turquoise’ look like a direct object, a name for something Sally sees. Chisholm suggested that we might remove this implication by inventing an adverb, ‘turquoise’ly; the property Sally continues to have would, according to this suggestion, be called ‘seeing turquoise’ly’ or ‘being appeared to turquoise’ly’. These are bizarre phrases, but I think it’s pretty clear that there is such a property as the one Chisholm said they denoted. At least this is clear if we assume that a given piece of turquoise looks the same in respect of color to every human being with normal color vision who observes it in ideal circumstances—and that is an assumption I’m going to make. If you want to have this property then, given that you have normal color vision, examine a piece of turquoise in a good light. If you want to stop having it, close your eyes. I think we all know what this property is, and it’s evident that it’s a property of *persons*, or at any rate of sentient beings, and of nothing else. It seems to me to be evident that it’s possible to have this property even if nothing has the property *being turquoise in color*. I would say that ten thousand years ago, very possibly, nothing had the property *being sky blue*. (Maybe there were sky-blue birds or flowers ten thousand years ago, but let’s suppose not.) Although nothing was sky-blue in those remote times, anyone who then looked at the sky on a fine day acquired a certain property, the property Chisholm would call ‘being appeared to sky-blue’ly’. (I’m going to have to insist that it’s just false that in such a case the perceiver does see something sky-blue, namely the sky. This is false for the very good reason that there is no such thing as the sky. And I’m going to have to insist, too, on the falsity of the thesis that the mind or consciousness of a person looking at the sky contains a sky-blue quale. I insist on this latter point because no one has ever been able to explain what a quale is. If there are qualia, then, as a simple matter of logic, each quale has, for every property, either that property or its complement, and no one has been able to give a coherent account of what combination of properties a quale has. I am willing to defend

this statement not only in this very general form, but in particular application to such alleged examples of qualia as afterimages, sounds, smells, and pains.)

This is the story I promised you. I hope that, as I promised, my way of telling the story displays my rather sparse ontology of the mental. I want to make it clear that, although I believe that lack of attention to ontological questions has led to confusion in the philosophy of mind, I do not deny that there are substantive problems in the philosophy of mind, problems that are by no means artifacts of their first framers' lack of attention to ontological questions. Consider qualia and their role in the statement of problems in the philosophy of mind. Several central problems in the philosophy of mind are usually framed as problems about qualia, but this is not an essential feature of those problems. If, as I do, one denies the existence of qualia, one still faces the question whether there can be what David Chalmers calls zombies, and one still has the inverted spectrum problem. Take zombies. Although the zombie problem is usually stated in terms of qualia, it's easy enough to state without reference to qualia. A zombie is a thing composed entirely of elementary particles, these particles being arranged in more or less the same ways that the particles that compose me or the particles that compose you are arranged, and which, unlike me and you, does not *experience*. Here I use the intransitive verb 'experience' to express the property that comprehends the members of a class of more specific properties, properties such as being in pain and being appeared to redly. Chalmers's problem is this: could there be a zombie? That is, is there in some possible world, a world in which the same physical laws hold as in the actual world, a being made of elementary particles arranged in more or less the same way as the particles that compose us denizens of the actual world, but which, unlike us actual people, does not experience?

Mention of zombies brings us to my final topic, property dualism, for philosophers who say it's possible for there to be zombies are just those philosophers who describe themselves as "property dualists" (as opposed to *substance* dualists, like Plato and Descartes). Property dualists distinguish between the physical properties of human beings and their mental properties, which, they say, are non-physical properties. We know what mental properties are: mental properties are properties that entail thought and sensation. We know what physical properties are: physical properties are properties that entail the property *being physical* or *being composed entirely of elementary particles*. But what are non-physical properties? Not, obviously, properties that entail the property *being non-physical*, or physical things could not have non-physical properties, and property dualists say physical things have non-physical properties. I believe the idea of a non-physical property should be spelled out this way: a non-physical property is a property whose distribution or extension in a world does not depend on, is not determined by, does not supervene upon, the way elementary particles are arranged in that world. Thus, if there could be two worlds which were perfect physical duplicates of each other (that is, duplicates as regards the arrangement of elementary particles), and in one world a certain object had F

and its counterpart in the other lacked F, F would be a non-physical property. No doubt there are problems with this definition. Definitions involving such notions as supervenience and “perfect physical duplicate” usually have unwanted consequences.<sup>1</sup> But I won’t try to answer the question whether there are technical problems with my “supervenience” definition of ‘non-physical property’, since nothing I want to say is going to hang on esoteric wrangles about supervenience. It will do for my purposes if we have a rough, intuitive grasp of the concepts employed by the property dualist.

Property dualists contend that human persons are physical things, things composed entirely of elementary particles, that they have physical properties (that much follows from their being physical things), that they also have non-physical properties, and that among these non-physical properties, perhaps coextensive with them, are such mental properties as they may have, and, finally, that they have—in the actual world, at any rate—just the mental properties we normally suppose them to have.

I must say that I find property dualism incredible. It seems to me to be evident that, tricky examples involving cleverly contrived properties aside, *all* the intrinsic properties a thing composed of quarks and electrons has at a given time *must* supervene on the properties of, and the mutual arrangement of, and the causal relations that hold among, those quarks and electrons. But I admit I have no argument for this thesis (as David Lewis has said, an incredulous stare is not an argument). I want to make just one point in closing. Whether or not property dualism is an incredible thesis, it seems to me that ‘property dualism’ is a very odd name to give it. Why is this thesis about supervenience a form of *dualism*? If the thesis is true, there are, or at least there may be, only physical or material substances and abstract objects. Some of these abstract objects, properties like *being appeared to sky-blue*ly, properties that are classified as mental not by their nature but by their content, have the following curious feature: they can belong—that is, it is metaphysically possible for them to belong—to a given thing composed entirely of elementary particles and fail to belong to another thing (maybe it would have to be a thing in another possible world) that consists

<sup>1</sup> Here’s an *odd* consequence of the definition: for all anyone knows, there may be properties that are both physical and non-physical; at any rate, it doesn’t seem to be demonstrable that there are no such properties. The following three assumptions jointly entail that some properties are both physical and non-physical, and it doesn’t seem to be demonstrable that any of them is false or that their disjunction is false: (i) it is impossible for there to be non-physical substances; (ii) some physical substances have mental properties; (iii) zombies are possible. If (i) is true, then “that it experiences” is a physical property. If (ii) and (iii) are true, then “that it experiences” is a non-physical property. (If these three propositions are individually possible, they certainly seem to be mutually consistent.) This is an odd result, but not a contradiction, since neither ‘physical property’ nor ‘non-physical property’ was defined as the contradictory of the other. It, the odd result, could be avoided if one defined ‘physical property’ as the complement (on substances) of ‘non-physical property’. We’d still have the following as a consequence of our three assumptions: Every non-physical property entails the property *being physical*, but I suppose that’s no odder than the assumptions of which it’s a consequence.

of particles having the same properties, arranged in the same way, and among which the same causal relations hold. An interesting thesis. A *false* thesis, I think, but interesting, and well worth extended philosophical discussion. But why call it a form of dualism?

Well, here is a guess. I think it's a plausible guess. If there are non-physical substances, then physical and non-physical substances (a cat and an angel, for example) are clean different kinds of thing. Although they are both substances right enough, the division of the category "substance" into the sub-categories "physical" and "non-physical" is an ontologically significant division. We call Descartes and Plato dualists because they think there are substances in both sub-categories. I would *suppose* that "property dualists" call themselves dualists because they think that the division of properties into physical and non-physical properties is an ontologically significant division of the category "property", a division as significant as the physical/non-physical division of the category "substance". If this is so, I think that the self-chosen description "property dualist" indicates a metaphysical confusion in the way property dualists conceive of properties. For, if I am right, the properties *that it is a cat* and *that it is an angel* are things of exactly the same sort: they are both things that can be said about things. They are both as abstract and bloodless as the Riemann curvature tensor. They differ not in their natures but in their content. If *that it is a cat* is one of the things that can be said truly about Professor Moriarty (who lives in my house) and *that it is an angel* is one of the things that can be said truly about St Michael, then Moriarty and Michael are things of different ontological kinds. But the properties themselves, *that it is a cat* and *that it is an angel*, are of the same ontological kind. And the same goes for *that it weighs 60 kilos* and *that it is thinking of Vienna*; the same goes for these two properties *whether or not* the extensions of properties of the same sort as the latter, mental properties, supervene on the distribution of elementary particles.