

## Why I Have no Hands

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### I.

Consider the following argument for the claim that there are no hands--or feet or ears or any other arbitrary parts of human beings.

Premise One I am the only rational, conscious being--for short, the only person--now sitting in this chair.

Trust me: my chair isn't big enough for two. You may doubt that every rational, conscious being is a person; perhaps there are beings that mistakenly believe themselves to be people. If so, read 'rational, conscious being' or the like for 'person'.

Premise Two Anything that would be rational and conscious in one environment could not fail to be rational or conscious in another environment without differing internally in some way.

Nothing can fail to be rational or conscious merely by having the wrong relational properties. All philosophers of mind except perhaps dualists and eliminative materialists make this assumption. The content of someone's intentional states might be sensitive to her surroundings: on Twin Earth there may be someone whose mind is just like yours except that your thoughts about water correspond in him or her to thoughts about something else, if the colourless, potable liquid called 'water' on Twin Earth is not H<sub>2</sub>O but a substance with a different chemical composition. But unless mental features are not caused by physical ones, that being could hardly fail to be rational or conscious at all, if you are rational and conscious.

Premise Three If there is such a thing as my hand, there is also such a thing as my "hand-complement": an object made up or composed of just those parts of me that don't share a part with my hand. [1]

If my hand exists, then "the rest of me but for my hand" exists as well. (I assume that I am a material object, and that my hand, if it existed, would be a part of me.)

This is just to say that there is nothing ontologically special about hands: saying that there are hands but no hand-complements would be as arbitrary as saying that there are hands but no feet. Any reasonable ontology of material objects that gives us hands gives us hand-complements as well. This might sound less than obvious because 'hand' is a familiar, compact word of ordinary English, while 'hand-complement' is philosophical jargon. But that is an accidental feature of our language, and presumably reflects our interest in hands and our lack of interest in hand-complements. There is no reason to suppose that it has any ontological significance. Consider that 'cheir' in ancient Greek and 'manus' in Latin, the words that dictionaries translate as 'hand', actually meant something that included eight or ten inches of forearm. Strictly speaking, the ancient Greeks and Romans had no word for what we call hands. But that does not imply that they disagreed with us about what material objects there are.

From these three premises (and a few empirical truths) it follows that there is no such thing as my hand. Suppose there is. Then by Premise Three there is also such a thing as my hand-complement. But my hand-complement differs from me only in its shape, size, and surroundings; its brain, sensory inputs, and behaviour are no different from mine. If you cut off my hand I should still be a person; but in that case I should be internally just like my hand-complement is now--except perhaps for some scar tissue around the wrist, and it's hard to see how that could make the difference between being rational and conscious and not being rational or conscious. And a thing cannot fail to be rational or conscious simply because of its relation to some other thing--simply by having the wrong neighbours. You might decline to call something a "person" for that reason (which seems a bit unfair), but that is beside the point. So by Premise Two, my hand-complement is a rational, conscious being if I am. But I am not my hand-complement. Thus, there are two people--two rational, conscious beings--now sitting in my chair, contrary to Premise One. Therefore I have no hands.

What goes for hands, of course, goes for feet, arms, legs, and the rest of that naïve ontology of "parts of the body" that we learned at nursery school. There are simply no such things.

I claim that this argument, childishly simple-minded though it may be, deserves serious consideration. To show this I shall first compare it with a better-known argument for the same conclusion, and then defend it against a battery of objections.

## II.

Peter van Inwagen (1981) has also argued that there are no hands. His argument

is directed at a more general claim which he calls the Doctrine of Arbitrary Undetached Parts: roughly speaking, for any subregion of the region of space occupied by any material object, there is a smaller material object that fits exactly into that subregion. For the sake of comparison I shall ignore some of the subtle details of van Inwagen's argument and bend it into a form analogous to that of my own:

Suppose there is such a thing as my hand. Then there is such a thing as my hand-complement. (Both claims follow from the Doctrine of Arbitrary Undetached Parts.) Now imagine that at time  $t$  my hand is amputated, and that I survive the operation: I still exist, without my hand, after  $t$ . (The loss of a hand is obviously the sort of thing that one can survive. Cutting off a thief's hand is not a form of capital punishment.) But my hand-complement also survives the operation, and continues to exist after  $t$ , for you cannot destroy a material object merely by detaching from it something that was never one of its parts--that is, merely by changing its surroundings. In that case, immediately after  $t$  my hand-complement and I occupy exactly the same space and are made of exactly the same atoms. By hypothesis, though, my hand-complement and I were numerically different before  $t$ , and if we are two things at one time we must be two things at every other time at which we exist. So there are two different things with the same location and made of the same matter at once; and that is absurd. Therefore there was never any such thing as my hand.

While I find van Inwagen's argument congenial, it is open to several objections that do not apply to mine. First there are those who would relativise identity to times (e.g. Myro 1986), in which case things that were numerically different at one time, such as my hand-complement and I, might be identical later on. And at least one philosopher has claimed that cutting off my hand would destroy my hand-complement (Burke 1994a, 619; 1994b). Whatever the merits of these positions may be, they are irrelevant to my own argument.

More seriously, many philosophers find nothing absurd in the idea that the same atoms might compose two different material objects at the same time (e.g. Hirsch 1982, 59; Johnston 1992; Kripke 1971, n. 19; Shoemaker 1984, 113; Thomson 1983; Wiggins 1968). The result of the amputation, on their view, is simply to squeeze my hand-complement and me into the same region of space. My argument is neutral on the general issue of whether two material objects can have all the same proper parts at the same time. To be sure, the argument entails that I could not share all of

my space and my matter with another being. But I have given a reason for thinking so, and not simply assumed it: if I did share all my matter with another being, there would be two people sitting in my chair; but I am the only one here.

Some metaphysicians believe that concrete material objects do not strictly endure through time, but are temporally extended, and consist of earlier and later temporal parts. For these philosophers also, van Inwagen's argument has no force (see Heller 1990, 2-6, 19f.). On their view, the temporal parts of my hand-complement and me that "occur" before  $t$  overlap only partly; but we have all of our parts that "occur" after  $t$  in common. My hand-complement and I are stretched out in time in much the same way as a highway is stretched out in space, and we overlap exactly in our "post- $t$ " parts, much as two highways may join and have a section of road in common. If the ontology of temporal parts is coherent, it is no more problematic for two things to share all of their matter for part of their careers than it is for two things to share some but not all of their spatial parts.

While one can evade van Inwagen's argument by accepting an ontology of temporal parts, that move is no protection against my argument. In fact it follows from my premises that I am not made up of temporal parts. If I were, then (assuming that I am mortal) I should be made up of an earlier half, which extends from the first moment of my existence to the midpoint of my career, and a later half, extending thence to my demise. In that case there would be at least two rational, conscious beings now sharing my chair: myself and (let's be optimistic) my earlier half. The only reason for denying rationality and consciousness to my earlier half is the fact that it is a proper part of another rational, conscious being--me. But that merely relational difference could not prevent my earlier half from being rational or conscious if I am rational and conscious now, any more than it could for my hand-complement. The fact that we don't call proper temporal segments of people 'people' is irrelevant. So no one is ever really alone, contrary to Premise One of my argument.

To be sure, the claim that we are temporally extended does not by itself entail that we are made up of arbitrary temporal parts, and one might doubt that there is such an object as my earlier half. But the philosophical utility of the temporal-parts ontology requires this further assumption, and as far as I know all actual "four-dimensionalists" accept it.

Now for the objections.

### III.

First a technical challenge. "Your argument proves too much. Since no special

features of your hand figure in the argument save that it is a part of you, if you have shown anything it is that you have no proper parts at all (i.e., no parts other than yourself, your 'improper' part). Suppose you have at least one proper part: call it 'Part'. Either Part includes your brain, or enough of your brain for it to be a thinking being, or it doesn't. If Part does include your brain, then by Premise Two it is a person numerically different from you, contrary to Premise One. If Part doesn't include your brain, then by a generalization of Premise Three there must be such a thing as the complement of Part. (You told us earlier that Premise Three wasn't meant to be a special principle about hands.) In that case the complement of Part would include your brain, and so it would be a person numerically different from you, again conflicting with Premise One. Either way, according to your argument there can be no such thing as Part. And what goes for Part goes for every proper part of you; thus you have no parts other than yourself. You seem to have given an argument for Cartesian dualism. If you insist that you are a material object, that leaves the unpalatable conclusion that you are a 150-pound mereological atom, made of stuffs, perhaps, but not of parts; and while that may have been a plausible view in Aristotle's time, it hardly squares with today's biochemistry and quantum physics. So at least one of your premises must be false." [2]

I have two replies.

First, the objection depends crucially on Premise Three--if there is a hand, there is a hand-complement--and while I find that premise extremely plausible, I could live without it. I might have called my paper "Why I Have no Head" instead of "Why I Have no Hands". For if there were such an object as my head, it would be just as rational, just as conscious, just as morally accountable as I am. But then there would be two people writing this paper. Since there aren't, there is no such thing as my head. No hands, no head, no upper half: the point is the same, and we can make it without Premise Three.

Second, Premise Three was not meant to imply that every part of me must have a complement. I chose my hand as an example because it is an arbitrary part (or it would be if it were there at all): because there is no principled reason to believe in hands that is not also a reason for believing in hand-complements, foot-complements, and any other medium-sized proper part of me that you might care to name. But there is a principled reason for believing that I have quarks as parts but not quark-complements, namely the principle that my only proper parts are mereological atoms--things not made up of further parts. So the proper generalization of Premise Three is not that any proper part of me must have a complement, but only that any arbitrary part must have one. It is consistent with

the premises of my argument that I have many non-arbitrary parts. [3]

#### IV.

The objection that perhaps comes most readily to mind is inspired by G.E. Moore: "Your conclusion is manifestly absurd. Here is one hand, and here is another. That many people have hands is something that no philosopher could ever call into doubt, for it is far more obvious than the premises of any philosophical argument could ever be. So if you have shown anything, it is that your three premises, compelling though they may appear, are somehow inconsistent."

Is my conclusion so absurd? I am made up of particles: quarks and electrons. Some of the particles that make me up are arranged in a complex way that makes them very useful for such tasks as typing letters and tying shoes. Physiologists could tell us a great deal about the nature of that arrangement, but for present purposes we can abbreviate it by saying that some of my particles are "arranged manually". I type my letters and tie my shoes by manipulating those particles. But although those particles arranged manually are parts of me, they do not by themselves compose anything. That is, there is no material object that has all the particles that are arranged manually right here as parts, and all the parts of which overlap some of those particles.

When Moore said, "Here is one hand and here is another," did he mean to say that the particles (or the matter) in a certain hand-shaped region of space compose a hand? I don't think so. Moore meant to say something that only a thoroughgoing sceptic or an idealist would doubt. He did not intend any metaphysical claim with far-reaching and intransigent consequences. He certainly didn't mean to say anything that conflicted with the premises of my argument. What our senses tell us is that there are some things, or some stuff, arranged manually, and that is what Moore's opponent, the idealist, denied.

But I am neither an idealist nor a sceptic. I don't deny the existence of an external world, or that there are particles arranged manually; I only reject the ontological claim that particles arranged in that way compose hands.

And which premise is the Moorean going to deny? That people are sometimes alone has at least as much Moorean certainty as the claim that there are hands. And we have already seen how to dispense with Premise Three. That leaves Premise Two, that rationality and consciousness are caused or entailed by a thing's internal properties. The Moorean would have to say that my hand-complement, or my upper half, is neither rational nor conscious, in spite of being neurologically and behaviourally indistinguishable from me; and she would have to come up with a

philosophical account of the mind that could accommodate that. Well, good luck to her. But do we really prefer radically revising our philosophy of mind to denying that there are hands?

In fact it is not obvious that my claim contradicts anything that we all believe. Perhaps those sentences of ordinary language that appear to entail the existence of hands can be paraphrased into sentences that serve roughly the same purpose but do not have that appearance. [4] (Think of the nominalist, who must explain how it can be correct to say, "There is a prime number between 20 and 25," even though on her view there are no numbers.) What makes Moore's famous sentence true, or at least somehow appropriate, I claim, is that there are some particles arranged manually and some other particles, different from the first, that are also arranged manually. I cannot give a recipe for paraphrasing all sentences about hands in this way, and you may doubt that the project could be carried out. Perhaps there are some obviously true sentences about hands that cannot be adequately paraphrased into the language of particles arranged manually. In any case, those of my opponents who would deny Premise One (see below) face a similar task, namely explaining how such ordinary sentences as 'He was home alone' can be true even though every person is always accompanied by many other rational beings.

## V.

"It may sound plausible in the abstract to say that rationality and consciousness supervene on a thing's intrinsic properties, and that nothing could fail to be rational or conscious simply by having the wrong surroundings. But since it follows from this that many proper parts of you are rational and conscious, it cannot be true. It is obviously absurd to suppose that your hand-complement, or your head, or your upper half, is a person. That would be like saying that the object made up of all the parts of my bicycle except its left pedal (and things that overlap it) is also a bicycle. Personhood is a maximal concept: no proper part of a person can be a person. But it would be equally absurd to suppose that your hand-complement or anything else was a rational, conscious speaker of English but not a person; if that were the case, you and I ought to wonder whether we are people. Thus, rationality and consciousness are also maximal concepts (Burke 1994a, 612; 1994b, 139). It follows that your hand-complement is neither rational nor conscious, and that Premise Two of your argument is false."

As it stands, this objection is not quite fair. It doesn't follow from Premise Two alone (that personhood is an intrinsic property) that many proper parts of me are people. For that, we need the additional premise that there are good-sized proper

parts of me. Well, let us add this premise.

Even so, the objection is incredible. If thought and consciousness were “maximal” in this sense, there could be two physically identical beings, with identical behaviour, one of whom had conversations, thought deeply, enjoyed fine art, and so on, and the other of whom was worse than an idiot, and had no psychological features at all. (If we cut off your hand, for example, you might be intrinsically indistinguishable from your undetached hand-complement as it is now; yet you would be conscious and intelligent and your hand-complement would not be.) If this were possible, it would be a real question whether you and I are rational or conscious. For all I know, some relational feature might prevent me from having psychological features, just as being a proper part of me prevents my hand-complement from having any. But if there are such things as thought and consciousness at all, it is as certain as can be that I think and am conscious.

In any case, denying Premise Two isn't going to solve any problems, for any principled reason for denying that your hand-complement is rational or conscious will equally be a reason for denying that you are rational or conscious. The principle that personhood (consciousness, etc.) is maximal, for example, entails that if some “whole human being” is a person, that being's hand-complement is not a person. But it also entails that if the hand-complement is conscious, the whole human being is not conscious. And as we have seen, the hand-complement is intrinsically just as well suited to be rational and conscious as the whole human being is. The assumption that the hand-complement is a person is just as plausible as a starting point in a philosophical argument as the assumption that the whole human being is a person. The “maximality principle” goes into effect only when some being has already been identified as a person; but it says nothing about which of the many suitable beings is rational or conscious in the first place.

Even if there were some non-arbitrary reason to suppose that the whole human being rather than the hand-complement were the sole rational, conscious being now sitting in my chair, the problem would not be solved. For if human beings are made up of arbitrary undetached parts, there is no such thing as the whole human being now sitting in my chair. No matter what candidate for that role you might choose, there will be another being just like that one except that it is smaller or larger by some minuscule amount--a single cell or molecule or atom. And nothing could make one of those beings rational and conscious and the other not rational or conscious. Assuming that the atom or cell that is a part of the one being but not the other is attached to the latter being--in the outer layers of its skin, for example--either being could with equal justice be called a “whole” human being. No one of

those beings that have my hand-complement as a proper part is better suited, intrinsically, to be a rational, conscious person than any other, even on the questionable assumption that whole human beings are somehow better suited to be rational and conscious than proper parts of human beings. If human beings are made up of arbitrary undetached parts and no person can be a proper part of any other, we can only conclude that there are no people at all (or at least no human people).

## VI.

I have saved what I take to be the most serious objection for last: "Your conclusion that there are no hands is not absurd, you said, because it doesn't contradict any of the statements about hands that we make in the ordinary business of life. If that is right, then we don't assert the existence of any hand-shaped material object when we say, in the ordinary business of life, such things as 'Mary fell and injured her hand.' So Moore's famous sentence doesn't wear its logical structure on its sleeve, since it doesn't imply the existence of hands. In that case, what prevents us from saying the same thing about some of your own sentences? You say that you are the only person now sitting in your chair, and we are invited to take that as something completely obvious. But when you appeal to that premise in your argument, it turns out to have unobvious metaphysical import, namely that everyone sitting in your chair is numerically identical with you. That is (to paraphrase David Lewis), you assume that in the ordinary business of life we count people by the relation of strict, numerical identity. But that is contentious. For all that anyone engaged in the ordinary business of life knows or cares, we might count people as 'one' whenever they have their 'thinking parts'--their brain--in common, rather than whenever they are numerically identical. Your chair is big enough to hold two numerically different people at once. It's just not big enough to hold two non-overlapping people. Counting by 'cerebral overlap', there is just one person sitting in your chair; counting by identity, there may be legion. [5] So if we take Premise One to be obvious and uncontroversial, your conclusion does not follow. If the conclusion does follow, Premise One is contentious, and you have not argued for it."

Fair enough. Just as there are two ways of reading the ordinary statement that I have hands, there are two ways of reading the ordinary statement that I am the only person sitting in this chair. I claim that it is true strictly speaking that I am the only person here, that I am sometimes alone, and so on, and conclude that it is true only loosely speaking that I have hands. You might do the opposite: you might say

that it is strictly true that I have hands and conclude that it is only loosely true that I am the only rational being here. One philosopher's modus ponens is another philosopher's modus tollens. Each of us must say something that sounds outrageous: you say that there is really more than one person sitting in my chair; I say that there are really no such things as hands. The main point of my argument is to show that we all face this dilemma: there are either too many people or not enough hands. Nevertheless I claim that your view is harder to accept than mine.

You apparently think that each of us is made up of arbitrary undetached parts, or that every subregion of the space you now occupy contains an object of its own. At any rate it is hard to think of any principled reason for believing that those of your particles that are arranged manually, pedally, etc., compose objects, that is not also a reason for supposing that just any of your particles compose something.

This view has radical consequences. [6] The idea is that we use a singular personal pronoun such as 'I' when the people we want to pick out overlap, or more precisely when they share the same brain. We say 'we' to refer in the first person to several non-overlapping people. So when you say 'I', you refer ambiguously to a vast number of overlapping thinking beings, many of whom are indistinguishable from one another by any practical means, since they differ by only one or two electrons. Which of those zillions of overlapping people are you? It seems that you couldn't be any of them. You are that person you pick out when you say 'I' (who else?). But you can't pick out any one rational being in that way. So although it may be true that you are a person, there is no such person as you. Instead there are many such people as you. There are far too many people for any of them to be you or I.

Could you pick out just one from the many if the word 'I', when uttered simultaneously by many overlapping people, always denoted the largest speaker? You might, if there were a largest speaker. But as we saw earlier, we cannot say of every quark and electron that it is either definitely a part of you or definitely not a part of you at a given time; your boundaries are not that precise. So if just any of those particles compose something, there is no largest aggregate of particles that definitely utters the word 'I' on any particular occasion. (And certainly no being is the largest such aggregate on every such occasion.)

Even if there were such a being as you, and you could pick that being out uniquely by saying 'I', you would have no way of knowing which person you were--which of the many thinking beings who share your brain and say 'I' whenever you do. [7] In fact this would be so even if there were only a few different people inside your skin instead of zillions. Even if your only "rival" were your hand-complement,

you would have no way of knowing whether you were the hand-complement or the whole human being. Any reason for believing that you are the whole human being would also be a reason for your hand-complement to believe that of herself. So for all you know, your hand is not a part of you.

You may argue that this sort of mistake is possible only if any being who uses the word 'I' in the usual way thereby denotes itself; and while that may ordinarily be a plausible assumption, it is far from obvious in the present context. If the word 'I' in your mouth picks out just one person, perhaps our linguistic conventions guarantee that it picks out a whole human being and not a hand-complement. And you are of course that person you pick out when you say 'I', if there is any one such person. So perhaps it is true by definition, as it were, that you are a whole human being. In that case, those people who overlap with you but who aren't whole human beings refer to you when they say, "I have two hands," and not to themselves; and since the belief that you have two hands is true, no one is mistaken about which being she is or what parts she has. Your hand-complement cannot know or even wonder who she is, for although she is just as conscious and just as intelligent as you are, linguistic convention prevents her from referring to herself in the first person, both in speech and, presumably, in thought. Most of the world's rational, conscious beings, in fact, would be prevented by linguistic convention from ever thinking or speaking about themselves in the first person.

But not even this scenario would enable you to know which being you are. Even if you could somehow pick one being out of the multitude by saying 'I', nothing would guarantee that you picked out the same being each time you said it. Whatever linguistic convention attaches your 'I' to you today might attach that word to someone else--one of the many beings who overlap with you--tomorrow. The privilege of being the referent of all of those first-person thoughts and utterances might at any time pass insensibly from you to another being, in which case you would lose the ability to think and speak about yourself, and begin thinking and speaking about another being, perhaps one with a few molecules more than you have. You wouldn't notice any difference, of course. It would still seem to you as if you were thinking and speaking about yourself. As far as anyone can tell, you might cease to be the referent of your first-person thoughts and utterances at any moment, and be none the wiser for it; likewise you may have come to be that referent only a moment ago. Your epistemic grip on yourself would be tenuous indeed.

And even if your 'I' somehow managed to refer to the same being each time you uttered it, you would have no way of knowing which being that was. All you could

know about which one you are is the trivial fact that you are that being--perhaps that whole human being--picked out when you say 'I'. But which being is that? On the current proposal there are countless overlapping human beings that for anything you could know are all equally good candidates for being the referent of your 'I'. None of them has any distinguishing feature that could enable you to know that it, rather than another, was the one you picked out. The lucky winner of the semantic contest would have no idea that she had won.

I find all of this harder to accept than the proposal that we are not composed of a great many arbitrary, undetached parts. I would sooner deny that we have hands than say that no one is ever alone, or that there is really no such person as you or I, or that no one ever knows which person one is. But I do not know how to defend this conviction, and it may be no more than a personal prejudice. If you do not share it, I shall have to be content with a more modest claim: if there is such a person as I, and if I can know which person I am, then I have no hands. [8]

## NOTES

1. Some things, the xs, compose something y just in case each of the xs is a part of y and every part of y shares a part with one or more of the xs.
2. Carter (1983, 130f.) gives a similar argument. That I am a 150-pound atom seems to be Lowe's view (1991, 97). Someone might object that if Part included only half of each cerebral hemisphere (if it were the front half of me, for example), perhaps neither Part nor its complement would be capable of thought. If so, the argument would show at most that my only proper parts were those such that neither they nor their complements included enough of my brain to be able to think. But it would be absurd to suppose I had such proper parts but no others--a front half but no left half, for example. Hence this weakness makes the objection no less damaging.
3. What if there are no mereological atoms? That is, what if every material object is composed of smaller parts, which are themselves composed of still smaller parts, and so on, ad infinitum? Then, for want of a principled answer to the question what proper parts I have, I suppose I should have to admit that I am composed of arbitrary, undetached parts, and reluctantly accept the consequences discussed in Section VI below. But I think we must ask whether this suggestion is ultimately coherent.
4. For a more thorough discussion of how this paraphrase project might be carried out, see van Inwagen 1990, § 9. The general strategy is of course due to Quine.
5. For a similar proposal see Lewis 1976. A technical difficulty is that if each human organism is composed of arbitrary undetached parts, there will be conscious beings that have my left cerebral hemisphere but not my right hemisphere as a part and other beings that include my right but not my left hemisphere. Thus, counting people as "one" whenever they have their thinking parts in common may entail that there are two people sitting in my chair.
6. Some of the points in what follows are made by Unger (1980).
7. Chihara (1994) discusses a similar epistemic problem, or pseudo-problem.
8. For helpful comments on earlier drafts of this paper I am grateful to Mark Heller,

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#### REFERENCES

- Burke, Michael. 1994a. Preserving the principle of one object in a place: A novel account of the relations among objects, sorts, sortals, and persistence conditions. Philosophy and Phenomenological Research 54, 591-624.
- . 1994b. Dion and Theon: An essentialist solution to an ancient puzzle. Journal of Philosophy 91, 129-139.
- Carter, William R. 1983. In defense of undetached parts. Pacific Philosophical Quarterly 64, 126-143.
- Chihara, Charles. 1994. The many persons problem. Philosophical Studies 76, 45-49.
- Heller, Mark. 1990. The ontology of physical objects (New York: Cambridge University Press).
- Hirsch, Eli. 1982. The concept of identity (New York: Oxford University Press).
- Johnston, Mark. 1992. Constitution is not identity. Mind 101, 89-104.
- Kripke, Saul. 1971. Identity and necessity. In M. Munitz, ed., Identity and individuation (New York: New York University Press) and repr. in S. Schwartz, ed., Naming, necessity, and natural kinds (Ithaca, NY: Cornell University Press, 1977).
- Lewis, David K. 1976. Survival and identity. In Amélie Rorty (ed.), The Identities of Persons (Berkeley: University of California Press).
- Lowe, E.J. 1991. Substance and selfhood. Philosophy 66, 81-99.
- Moore, G.E. 1939. Proof of an External World. Proceedings of the British Academy XXV.
- Myro, George. 1986. Identity and time. In R. Grandy and R. Warner (eds.), Philosophical grounds of rationality (Oxford: Clarendon Press).
- Thomson, Judith Jarvis. 1983. Parthood and identity across time. Journal of Philosophy 80, 201-220.
- Unger, Peter. 1980. The problem of the many. Midwest Studies in Philosophy 5 (Minneapolis: University of Minnesota Press), 411-468.
- Van Inwagen, Peter. 1981. The doctrine of arbitrary undetached parts. Pacific Philosophical Quarterly 62, 123-137.
- . 1990. Material beings (Ithaca, NY: Cornell University Press).
- Wiggins, David. 1968. On being in the same place at the same time. Philosophical Review 77, 90-95.