



Deposited via The University of Sheffield.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/124931/>

Version: Accepted Version

Article:

Olson, E.T. (2017) Ben's Body Reads the Guardian. *Chinese Semiotic Studies*, 13 (4). pp. 367-380. ISSN: 2198-9613

<https://doi.org/10.1515/css-2017-0021>

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

Eric T. Olson

Ben's body reads the Guardian

In *Chinese Semiotic Studies* 13 (4), 2017: 367-380

Abstract: We can say *Ben is reading*, but not *Ben's body is reading*. The relational account says that this is because our bodies are objects that do not read. On the false-implication account, by contrast, to say *Ben's body is reading* is to say that Ben is reading, while implying, falsely, that reading is some sort of brute-physical property. Besides being metaphysically neutral, this sort of view explains far better why we cannot say such things as *Ben's mind is six feet tall*. But neither account explains why we cannot say *Ben's body is six feet tall*. The article argues that a variant of the false-implication account can solve this puzzle.

1 The first puzzle

Here are some things we can say in ordinary circumstances:

Ben reads the *Guardian*.
Ben believes in God.
Ben is fond of newts.
Ben has a headache.
Ben is out for a walk.

And here are some things we cannot say:

*Ben's body reads the *Guardian*.
*Ben's body believes in God.
*Ben's body is fond of newts.
*Ben's body has a headache.
*Ben's body is out for a walk.

There is something badly wrong with these statements. At best we might make some of them in special contexts: We might say that Ben's body was out for a walk if he were sleepwalking. But even that would be a humorous and nonliteral description.

More generally, it appears that we cannot attach to terms such as *Ben's body* any predicate that expresses or entails a mental property. We can say (in ordinary circumstances) that someone's body is F only if something can be F without being conscious or intelligent. So we can say, for instance, that Ben's body is composed largely of oxygen, carbon, and hydrogen, because things entirely devoid of mentality can have that composition. But we cannot say that Ben's body is

conscious or intelligent, or has any property that entails being conscious or intelligent.

This rule applies to talk of animals as well as of people. We can say *The lion is hungry* or *The lion is stalking a gazelle*, but we cannot say **The lion's body is hungry* or **The lion's body is stalking a gazelle*. Nor is the phenomenon confined to English: In an informal survey, native speakers have assured me that Czech, Farsi, German, Hebrew, Italian, Mandarin, and Spanish have the same pattern of usage.

Why is this? Why can we say, in ordinary contexts, that a person or an animal has beliefs and preferences and sensations, or engages in purposeful action, but not that a person's or an animal's body has or does these things?

2 Clarifications

The question is about the word *body* in the possessive sense — not other uses of the word. *Body* can mean simply *physical object*, as when we call the sun and moon heavenly bodies, or in the notorious “three-body problem” (using Newton's laws to calculate the gravitational interactions among three or more massive objects). My chair is *a body* in this sense, but it is not *someone's body*. To be a body in the possessive sense is to be the body of someone or something. (I am unsure whether the term *human body* is possessive in this sense — whether there could be a human body that was never someone's body.)

Sometimes we use the word *body* in a possessive but spatially restricted sense, to mean something like *torso* — as when we say that Ben's extremities are tanned but his body is pallid. This is not the sense at stake here either. That sense is expressed in the sentence *Ben's extremities are tanned but **the rest of his body** is pallid*. I will call this sense *possessive body talk*.

3 The relational account

Let us now turn to my question: Why can we say that Ben reads the *Guardian* but not that his body does? Two sorts of answers have been proposed.

The first is that it is actually false that Ben's body reads the *Guardian*. This is the view of David Wiggins:

There is something absurd — so unnatural that the upshot is simply falsity — in the proposition that people's bodies play chess, talk sense, know arithmetic, or even play games or sit down. (1976: 152)

The reason it is false is that a person is one thing and her body is something else. More precisely, people's bodies are things lacking in mental properties. It's wrong to say *Ben's body reads the Guardian* because the expression *Ben's body* refers to something that does not and cannot read. Nor does it have beliefs or preferences, or suffer pain. And although it can move in an ambulatory fashion, it cannot actually walk, as walking is an intentional action and our bodies cannot have

intentions. The same goes for the bodies of animals: we cannot say *The lion's body is stalking a gazelle* because the phrase *the lion's body* refers to an object that is incapable of intention and thus of action. It can only move in a way that would be stalking were it the result of an appropriate intention on the part of the lion's body.

To say that someone's body is F, then, or that someone has an F body, is to say that that person stands in a special relationship to a certain object, namely her body. Having a muscular body is like having a muscular cousin, except that the ownership relation we bear to our bodies is different from the one we bear to our cousins. Because of its implication that possessive body talk asserts a relation between the person (or animal) and something else, I will call it the *relational account* of such talk.

The relational account suggests an explanation of another important feature of possessive body talk, namely that we cannot speak of the bodies of chairs or trees. Trees *are* bodies, we might say — that is, material objects — but they cannot *have* bodies. We might call the trunk of a tree its “body” — or more likely “the body of the tree” — but that would be the spatially restricted sense I set aside earlier. More generally, we cannot speak of a thing's body unless that thing has mental properties. Why should this be?

The relational account suggests that it is due to the nature of the body-ownership relation. If a person (or animal) is one thing and her body is something else, we can ask what makes something the body of a particular person (or animal). What is it about the way I relate to a certain object that makes it my body — rather than your body, or no one's? How should we complete the formula “x is y's body if and only if...x...y...”? A common answer is that my body is “the vehicle of my agency in the world and my knowledge of the world” (Swinburne 1984: 22; see also Shoemaker 1976). I move by moving my body, and perceive by obtaining information from my body's sense organs. So what makes something my body is roughly that I can move it just by intending to move, and can perceive by means of it. Or perhaps my body is the largest such object: although I can move my left hand just by intending to, and can perceive with it, it is not my body, but only a part of it. If something like this is right, then a thing can have a body only if it is capable of action and perception. That would explain why we cannot speak of a thing's body unless it has mental properties, and thus why a tree has no body. (Tye [1980: 181] proposes instead that *x's body* means roughly *the bearer of all the physical and spatio-temporal properties truly predicable of x in ordinary language*. This would appear to make it perfectly correct to speak of the bodies of chairs or trees.)

The relational account has a striking metaphysical implication: that each person or animal stands in some sort of ownership relation to a certain object, namely her body. That object has all the physical properties we ordinarily attribute to the person or animal whose body it is: It has, for instance, a normally functioning nervous system and sense organs. Yet it is entirely devoid of mental

properties. So the very meaning of the word *body* in the possessive sense implies that these objects lack our mental properties. This makes it a contradiction in terms to say that people *are* their bodies — that a person and her body are one and the same thing — as it would follow that people — that is, rational, conscious beings — have no mental properties. The relational account makes the word *body* metaphysically loaded.

This need not imply that a person or animal is a nonphysical thing (or has a nonphysical part), as substance dualists say — though it is consistent with that view. It may be that a person is a material thing with the same physical properties as her body, but with mental properties as well. (This is apparently Wiggins' own view [1976: 153]; see also Shoemaker 1984: 113—114) But either of these would be significant and highly contentious claims.

The first — the dualist view — is normally taken to imply that it is absolutely impossible for any material thing to have any mental property. (If any material thing could have mental properties, normal, healthy human bodies would have them.) The second has an even more surprising implication: that a thing's physical properties are never sufficient to give it mental properties. More strongly, there are beings physically identical to us but without any conscious awareness or other mental features. Philosophers of mind call such beings “zombies” (Kirk 2015, Olson forthcoming). And although there is controversy over the logical possibility of such zombies — whether they could exist if the laws of nature were different, say — no one believes that there actually are any.

Both alternatives raise the difficult question of why the objects we call our bodies cannot have mental properties. What prevents them from using their brains to think? This question must have an answer. The relational account tells us nothing about what it might be.

Now I stated the relational account as the view that the phrase *Ben's body* refers to a physical object lacking mental properties, making it wrong to say *Ben's body reads the Guardian* because Ben's body is something that cannot read. But someone could say instead that it sounds wrong simply because *Ben's body* refers to something that we *believe* to lack mental properties. We all have a deeply held conviction that our bodies cannot read. Even those who are strongly opposed to the metaphysical implications just discussed — substance dualism and the existence of zombies — have the conviction. Otherwise they would find it perfectly appropriate to say *Ben's body reads the Guardian*; yet this sounds wrong to everyone. But for all that, the conviction could be mistaken. Perhaps our bodies really can read. We may even be our bodies. This variant of the relational account would have no troubling metaphysical implications. It would imply only that we all accept a claim with those implications. The difference between these two variants is unimportant for present purposes. I will stick with the first, but everything I have to say could easily be adapted to fit the second.

4 The false-implication account

The relational account says that *Ben's body reads the Guardian* is wrong because *Ben's body* refers to an object other than Ben that cannot read. (Or, alternatively, it sounds wrong because that phrase refers to something that we all believe cannot read.) The statement is false in the way that *Ben's chair reads the Guardian* is false. The second explanation says that the phrase *Ben's body* refers to Ben himself. But it refers to him in a way that implies or suggests or otherwise indicates something about the attached predicate or the property it expresses. An utterance of *Ben's body reads the Guardian* does two things. First, it says that Ben reads the *Guardian*. And second, it makes a comment about the status of reading the *Guardian*. The comment is roughly that reading the *Guardian* is some sort of brute-physical property. So the reason it is wrong, in ordinary circumstances, to say *Ben's body reads the Guardian* is not that Ben's body is something that cannot read, but that reading the *Guardian* is not a brute-physical property.

Referring to Ben as *Ben's body* is a bit like referring to a house as *a pile of stones*. It may be that any stone house literally is a pile of stones; but to refer to it in that way is to imply or suggest that it is in a poor state of repair. It would be wrong, in ordinary circumstances, to call a house in perfect condition a pile of stones not because it isn't one, but because the description suggests falsely that the house is falling down.

So we can say in ordinary circumstances *Ben's body is composed largely of oxygen, carbon, and hydrogen*, because having that composition is a brute-physical property; but we cannot say *Ben's body believes in God, is fond of newts, has a headache, or is out for a walk*, because those are not brute-physical properties.

Jay Rosenberg has given an account of this sort. He contrasts it with the relational account by saying that possessive body talk

does not serve the function of indicating a special subject, a non-person, to which certain properties are to be attributed, but rather serves the function of making a comment about certain properties which are attributed to the person himself, namely that they are not exclusively properties of persons (or of living organisms). (1998: 73; see also Rosenberg 1983: 48f-58)

And I have said something similar myself (Olson 1997: 152—153, 2006: 257—258). So the proposal is that statements such as *Ben's body reads the Guardian* are wrong not because they refer to an object — someone's body — that cannot read, but because they carry the false implication that reading is a certain sort of brute-physical property. Call this the *false-implication* account of possessive body talk.

Whether this would make such statements false, or merely inappropriate or misleading, depends on the nature of the implication. It could be that in saying

that Ben's body is F, we are actually saying (among other things) that being F is a brute-physical property, or something that entails this. In that case the statement would be false. But the implication could be weaker. I might say that Ben's body is F, rather than simply that Ben is, in order to get you to think that being F is a brute-physical property, much as I might refer to Ben's house as a pile of stones in order to get you to think that it's a ruin. Yet it may be that while I have suggested that being F is brute physical, all I have actually said is that Ben is F. So the false-implication account comes in two versions, depending on whether the statement that someone's body is F entails that being F is a brute-physical property or whether it only suggests it in some way. I don't know which version is better, and I will set the point aside.

What counts as a brute-physical property — a property of the sort that we use possessive body talk to call attention to? Rosenberg says it is one that inanimate objects can have. To say that someone's body is F implies that being F is a property that such things as sticks and stones can have — objects that are not people or living organisms (1998: 68). But this seems too restrictive. It is perfectly natural to say that Ben's body absorbs nutrients through the wall of the intestine, or is healthy or diseased, even though these are not properties that inanimate objects can have. A better suggestion might be that brute-physical properties are those that a thing can have without having any mental properties. A thing cannot read, or be fond of newts, or go for a walk or sit down, without having mental properties, but it can still absorb nutrients through the wall of the intestine or be healthy or diseased. That is what makes it wrong to say that Ben's body reads or is fond of newts or is out for a walk, and acceptable to say that his body is healthy or diseased or composed largely of oxygen, carbon, and hydrogen.

What about the fact that we cannot speak of the chair's or the tree's body? The false-implication account suggests that this is because chairs and trees cannot have mental properties (and we all know this), and so there is no point in indicating that a property we are attributing to them is brute physical. There is a point in calling attention to the distinction between brute-physical and other properties when speaking of people or animals, but not when speaking of chairs or trees.

5 Advantages of the false-implication account

The false-implication account has two important advantages over the relational account. First, it has no contentious metaphysical implications. It does not imply that each person stands in an ownership relation to an object having all the physical properties we attribute to the person in ordinary circumstances yet without mental properties.

You might think it implies that people are physical things — things having the properties expressed by the predicates we can appropriately attach to such terms as *Ben's body* in ordinary contexts. If the expression *Ben's body* refers to Ben, the thought would go, then Ben must *be* his body; and surely Ben's body is a

physical thing. That our bodies are made up largely of oxygen, carbon, and hydrogen would imply that we ourselves made up of those elements. And this is a contentious metaphysical claim, even if it is nowadays more widely held than substance dualism.

But none of this follows from the false-implication account. The account is entirely consistent with the view that Ben and other human people are nonphysical entities — Cartesian immaterial substances or the like. Suppose we can say truly, in ordinary contexts, that Ben's body is visible, and that being visible is a brute-physical property. (It's a property that stones have.) To say that Ben's body is visible, on the false-implication account, is to say that Ben is visible, with the implication that being visible is a brute-physical property. Yet this does not imply that Ben actually has the property of being visible — which, I suppose, only physical things can have. At most it follows that we can truly say in ordinary contexts that Ben is visible. And this appears compatible with his being wholly immaterial. That is in fact the view of those who take Ben to be immaterial. When they are discussing metaphysics, they will say that we are immaterial and thus not visible. Yet in ordinary contexts the right thing to say, whatever metaphysical theory we may hold, is that we are all visible (and thus unlikely to sneak unnoticed past the bouncer). Substance dualists simply believe that what makes the ordinary statement that Ben is visible true is that his body — the vehicle of his agency and his knowledge of the world — is a visible material thing. This is all consistent with the false-implication account. The account is metaphysically neutral.

The second advantage of the false-implication account is that it suggests an answer to a related puzzle about the use of terms such as *mind* in a possessive sense. Here are some things we can say in ordinary circumstances:

Ben weighs 170 pounds.
Ben is out for a walk.
Ben is restless and inquiring.
Ben's mind is restless and inquiring.

And here are some things we cannot say:

*Ben's mind weighs 170 pounds.
*Ben's mind is out for a walk.

More generally, it appears that we cannot attach to expressions such as *Ben's mind* any predicate that expresses or entails a physical property. We can say in ordinary circumstances that someone's mind is F only if being F is a certain sort of mental property.

Why is this? An analogue of the relational account would say that for someone's mind to be F, or for her to have an F mind, is for her to stand in a special relationship to a certain object — her mind — that is F. Having an inquiring

mind is like having an inquiring cousin, except that the ownership relation we bear to our minds is different from the one we bear to our cousins. So a person is one thing and her mind is something else. What's more, people's minds are things lacking in physical properties. So the reason it's wrong to say that Ben's mind weighs 170 pounds, or is tall and thin, is that the expression *Ben's mind* refers to something that has no weight or size or shape. It has only certain mental properties, such as being restless and inquiring (and mental properties are not a species of physical properties). Ben's mind is a wholly nonphysical thing.

There are of course metaphysicians who believe that each of us does stand in a special relationship to a wholly nonphysical entity that has mental properties such as being conscious or intelligent or inquiring or active. But no one would take this pattern of linguistic usage to be evidence in support of that view. No one ever argues for substance dualism on the grounds that we cannot say in ordinary circumstances that Ben's mind weighs 170 pounds. A relational account of "possessive mind talk" is hopeless.

A far better explanation is that to speak of someone's mind is to ascribe a certain property to her and to imply or suggest that it is a certain sort of mental property. To say *Ben's mind is restless and inquiring* is to say that Ben is restless and inquiring and to indicate that being restless and inquiring are mental properties. (We don't mean that he is physically restless — that he cannot sit still, say.) *Ben's mind*, in ordinary language (as opposed to metaphysics), means more or less the same as *Ben's intellect* — a term that no one would take to refer to a thinking being. This account is metaphysically neutral. And it is precisely analogous to the false-implication account of possessive body talk.

Exactly what sort of mental properties we use the expression *Ben's mind* to indicate is a difficult question. We cannot say that Ben's mind is fond of newts or has a headache. They have to be cognitive or intellectual properties. But not just any cognitive or intellectual properties: We can't say that Ben's mind knows the times tables up to thirteen, or has forgotten to feed the dog. Sometimes we use the expression with predicates expressing character traits: We say that Ben's mind is sharp, subtle, methodical, or active. And sometimes we use it to indicate that someone accepts a certain claim in an abstract, intellectual way but is prevented by his emotions from embracing it fully: My mind knows that flying is safe, yet I can't board a plane without breaking into a cold sweat. (No doubt there are other sorts of cases as well.) All of this is compatible with the general claim that to say that someone's mind is F is to say that that person is F, while implying or suggesting something about the nature of being F.

6 The second puzzle

Despite its attractions, however, the false-implication account is not right as it stands. It tells us that to say that Ben's body is F is to say that Ben is F, with the implication that being F is a brute-physical property: roughly one that does not entail any mental properties. It follows that we can say that Ben's body is F

(where being F is a brute-physical property) just when we can say that Ben is F. So we should be able to attach predicates expressing brute-physical properties (*brute-physical predicates* for short) to either *Ben* or *Ben's body* indifferently.

But this is not so. Here, once again, are some things we can say in ordinary circumstances:

Ben is six feet tall.

Ben weighs 170 pounds.

Ben has the flu.

Ben is upstairs.

Ben's body has a surface area of 1.7 square metres.

Ben's body has a total water content of around 40 litres.

The amount of fluid in Ben's body varies throughout the day.

When wet, Ben's body has an electrical resistance of around 300 ohms.

And here are some things we cannot say:

*Ben's body is six feet tall.

*Ben's body weighs 170 pounds.

*Ben's body has the flu.

*Ben's body is upstairs.

*Ben has a surface area of 1.7 square metres.

*Ben has a total water content of around 40 litres.

*The amount of fluid in Ben varies throughout the day.

*When wet, Ben has an electrical resistance of around 300 ohms.

Some of these can be said in special circumstances. We might say that Ben's body is upstairs if Ben is dead. And philosophers may say such things in discussing metaphysics: Richard Swinburne, for instance, writes, "A man's body is that to which his physical properties belong. If a man weighs ten stone then his body weighs ten stone" (1997: 145). But no one would say these things in ordinary circumstances. They sound odd, if not wrong. Yet all the predicates involved are indisputably brute physical. In fact relatively few brute-physical predicates can be attached to *Ben* and to *Ben's body* indifferently: *is healthy*, perhaps, *burns 3000 calories a day*, or *has a temperature of 36.4L C*. Again, very similar patterns of usage are found in Czech, Farsi, German, Hebrew, Italian, Mandarin, and Spanish.

So some brute-physical predicates are what we might call "exclusively personal", in that we can attach them to personal names such as *Ben* but not to terms such as *Ben's body*: *is six feet tall*, *weighs 170 pounds*, *has the flu*, and *is upstairs*, for instance. Others exhibit the opposite pattern of usage, and can be attached to terms such as *Ben's body* but not to *Ben*: *has a surface area of 1.7 square metres*, *has a water content of 40 litres*, and the like. Call them "exclusively bodily". A smaller number are neutral: neither exclusively personal nor

exclusively bodily.

The false-implication account as I have stated it cannot account for this fact. Consider exclusively personal predicates such as *is six feet tall*. The account tells us that to say that Ben's body is six feet tall (in ordinary circumstances) is to say that Ben is six feet tall while indicating that being six feet tall is a brute-physical property. It is clearly appropriate to say, in ordinary circumstances, that Ben is six feet tall (supposing that that is his actual height); and being six feet tall is a brute-physical property. So it ought to be equally appropriate to say that Ben's body is six feet tall. And the same goes for the other cases. There should be no exclusively personal brute-physical properties at all.

Now consider an exclusively bodily predicate: *has a surface area of 1.7 square metres*, say. Since it too is clearly brute physical, the only reason why it could be wrong to say that Ben has that surface area, on the false-implication account, would be if he did not have the property. And the same would go for any other surface area. It would follow that a person cannot have a surface area, or any other property expressed by an exclusively bodily predicate. People could not be material things. That would deprive the false-implication view of its metaphysical neutrality.

So the false-implication account cannot be right as it stands. But this is no reason to prefer the relational account. It implies that the expression *Ben's body* refers to an object having properties of the sort expressed by exclusively bodily and neutral predicates, but no properties expressed by exclusively personal predicates. So Ben's body would have a surface area and a water content but no height or weight or location; it could be healthy or diseased but could not have any specific ailment such as flu. No one would say that. This looks like a decisive objection to the relational account.

7 A proposed solution

I think a variant of the false-implication account might solve the second puzzle. Suppose that to say, in ordinary circumstances, that Ben's body is F is to say that Ben is F, with the implication that being F is a brute-physical property of a special sort: roughly an unfamiliar one. We can say that Ben's body has a surface area of 1.7 square metres or contains 40 litres of water because these are properties discussed only in scientific contexts (as well as being brute physical). We cannot ordinarily say that Ben's body is six feet tall or weighs 170 pounds or is upstairs because, although these too are brute-physical properties, they are familiar to everyone and not discussed only in science. By contrast, it seems acceptable to say that Ben's body has a mass of 77.11kg, employing a predicate we expect to issue only from the mouth of someone wearing a lab coat.

Or at least this holds for exclusively bodily predicates, which we can attach to *Ben's body* but not to *Ben*. Neutral predicates that can be attached to either term indifferently are not usually unfamiliar or confined to scientific contexts.

What about the fact that it sounds wrong to say that Ben has a surface

area of 1.7 square metres or contains 40 litres of water? The false-implication view says nothing about this. It is only an account of terms such as *Ben's body*, and is silent about what predicates we can attach to people's names.

Here the rule appears to be the obverse of the one governing possessive body talk. We can attach brute-physical predicates to *Ben* just when they are in some way familiar: *is six feet tall, weighs 170 pounds, is upstairs*, and so on. Predicates such as *has a surface area of 1.7 square metres* and *contains 40 litres of water* express properties we don't normally think of ourselves as having. They are, we might say, alienating. We know they have something to do with us — they pertain to us in some way or other — but we think of them as somehow less close to us than familiar physical properties such as height and weight. We want to hold them at arm's length. We express this sense of distance by putting them in the idiom of possessive body talk: by attaching them not to *Ben*, but to *Ben's body*.

More generally, there are a variety of brute-physical predicates that we use in describing ourselves (and other animals). The more familiar such a predicate is — the more commonplace in ordinary, nonscientific talk — the more ready we are to use it “directly” — that is, to attach it to personal terms such as *Ben*. The less familiar it is — the more it is confined to scientific contexts — the more alienated we feel, and the more likely we are to use it “indirectly” by attaching it only to possessive body terms. The neutral predicates, such as *is healthy*, are those in the middle of the spectrum, which we can thus use in both ways. Because they are in some sense scientific terms, we can attach them to *Ben's body*, but because they are also familiar, we can attach them equally to *Ben*.

That is my best attempt to explain the peculiar way in which we use possessive body (and mind) talk. The account can no doubt be improved, but it looks like the right sort of thing. And I am pleased to say that it has no troubling metaphysical implications.

It does, however, have an interesting linguistic implication. It implies that all ordinary uses of terms such as *Ben's body* are eliminable. We can always replace ordinary statements of the form *Ben's body is F* with something like *Ben is F, and being F is an unfamiliar brute-physical property* without loss of propositional content. And the same goes for *Ben's mind*: We can replace ordinary statements of the form *Ben's mind is F* with something like *Ben is F, and being F is a cognitive property of such-and-such a sort* without loss of propositional content. In saying that this holds for ordinary statements I exclude poetry, jokes, and discussions of metaphysics. Whether such terms as *Ben's body* and *Ben's mind* have a legitimate role in metaphysics, where they are not eliminable in this way, is a large question that I cannot discuss here — though for what it's worth I think the answer is No (on this point I recommend van Inwagen 1980).

Acknowledgements

I thank Jenny Saul, Karsten Witt, and Hongbing Yu for comments on earlier versions.

References

- Kirk, Robert. 2015. Zombies. In Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Summer edition.
<https://plato.stanford.edu/archives/sum2015/entries/zombies/>
- Olson, Eric. 1997. *The human animal*. New York: Oxford University Press.
- Olson, Eric. 2006. Is there a bodily criterion of personal identity? In F. MacBride (ed.), *Identity and modality*, 242-259. Oxford: Clarendon Press.
- Olson, Eric. Forthcoming. The zombies among us. To appear in *Nozs*.
- Rosenberg, Jay. 1983. *Thinking clearly about death*. Englewood Cliffs, NJ: Prentice-Hall.
- Rosenberg, Jay. 1998. *Thinking clearly about death* (2nd Edn.). Indianapolis: Hackett.
- Shoemaker, Sidney. 1976. Embodiment and behavior. In A. Rorty (ed.). *The identities of persons*, 109-138. Berkeley: University of California Press.
- Shoemaker, Sidney. 1984. Personal identity: A materialist's account. In S. Shoemaker and R. Swinburne, *Personal Identity*. Oxford: Blackwell.
- Swinburne, Richard. 1984. Personal identity: The dualist theory. In S. Shoemaker and R. Swinburne, *Personal Identity*. Oxford: Blackwell.
- Swinburne, Richard. 1997. *The evolution of the soul* (Rev. Edn.). Oxford: Clarendon Press.
- Tye, M. 1980. In defense of the words 'human body'. *Philosophical Studies*, 38. 177-182.
- van Inwagen, P. 1980. Philosophers and the words 'human body'. In van Inwagen (ed.). *Time and cause*, 283-299. Dordrecht: Reidel.
- Wiggins, D. (1976). Locke, Butler, and the stream of consciousness. In A. Rorty (ed.). *The identities of persons*, 139-174. Berkeley: University of California Press.