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# The Zombies Among Us

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abstract Philosophers disagree about whether there could be "zombies": beings physically identical to normal human people but lacking consciousness. Establishing their possibility would refute physicalism. But it is seldom noted that the popular 'constitution view' of human people implies that our bodies actually are zombies. This would contradict several widely held views in the philosophy of mind.

1.

"Zombies", in the philosophers' sense, are beings physically identical to normal human people, with identical behavior, but lacking conscious experience (e.g. Chalmers 1996: 94). Their bare logical possibility is taken to show that consciousness is not a purely physical phenomenon, contrary to the popular view that everything is ultimately physical: physicalism.<sup>1</sup> Opponents of physicalism argue that zombies are possible; physicalists try to rebut these arguments, or, if they can, to show that zombies are impossible. But both sides agree that there are not actually any zombies. Robert Kirk goes so far as to say,

All the philosophers I know--indeed all the sane people I know--agree that in fact there are no philosophical zombies. Not only that: they agree they are ruled out by the laws of nature. (2005: 3)

While this may be true of those debating the nature of conscious experience, however, plenty of metaphysicians believe that the laws of nature do allow zombies. Not only that: they think zombies actually exist. There are as many zombies among us as there are conscious human people, if not more. Or at least that follows from what may be the most widely held view of the metaphysics of the human person. This would clearly have important consequences for the philosophy of mind--even if they are not quite those that feature in the zombie debates.

2.

The metaphysical view I speak of is that we are material things coinciding with

<sup>&</sup>lt;sup>1</sup>Chalmers 1996: 123, Kirk 2005: 8. Both physicalists and their opponents claim to know what it is for something to be physical, despite serious worries (Crane and Mellor 1990). I will go along with it for the sake of argument. It would affect my point only incidentally if there were no such doctrine as physicalism.

our bodies (or perhaps with masses of matter or the like--more on this later). This means that you and I are made of the same matter as our bodies, yet different from them. I am no bigger or smaller than my body: I extend all the way out to my skin and no further. Every atom of mine is a part of my body, and every atom of my body's is a part of me. We are atom-for-atom physical duplicates, not only now but at every time when I exist. Nevertheless, I am one thing and my body is another. This is sometimes called the constitution view, as it is commonly put by saying that people are "constituted by" their bodies. There are different accounts of why it is that our bodies constitute us rather than our constituting them, but this asymmetry will not concern us. Advocates of the constitution view include Baker (2000), Johnston (1992, 2007), Kripke (1971: n.19), Lowe (1996, 2010)<sup>2</sup>, Pollock (1989: 32-7), Shoemaker (1999, 2008, 2012), and Sosa (1987) (see also Olson 2007: ch. 3).

Constitutionalists say that people are distinct from their bodies because they differ modally. If my brain were transplanted into your head, and the operation preserved psychological continuity, I should go with the brain: the transplant recipient would be me with a new body and not you with a new brain. But my body would stay behind with an empty head. Constitutionalists infer from this that I have a property that my body lacks, namely being such that I should go with my brain if it were transplanted. Or if I died peacefully, that would be the end of me but not the end of my body: it has a property that I lack, namely being able to exist in an irreversibly unconscious state.

In the normal case there will also be historical differences. As well as outlasting me as a corpse, my body existed before I did as an unthinking foetus (Baker 2000: 204f.). But we differ historically because we differ modally. Even if there were no historical difference, so that my body and I coincided at every time when either of us existed, there would still be the same difference in our modal properties. Constitutionalists say that we stand to our bodies as a clay statue stands to the lump of clay it is made from. Here too there is no physical difference. Yet even if the two objects coincide throughout their careers, they differ modally: the lump, but not the statue, has the power to survive squashing. And if clay statues coincide with lumps of clay distinct from them, it would be surprising if each of us did not coincide with a lump of flesh, with a body, or with some other material thing distinct from ourselves.

But constitutionalists do not believe that we differ from our bodies only modally and historically. There must also be psychological differences. This is for at least three reasons (Olson 2003: 329f.).

First, if people and their bodies were psychologically indistinguishable, there would be twice as many conscious, intelligent beings as we thought. Every conscious person would have a conscious body distinct from her. This paper

<sup>&</sup>lt;sup>2</sup>Lowe denies that we are composed of atoms, but accepts the rest of my description (1996: 36).

would have two authors, even if for ordinary purposes we "count them as one" (Lewis 1993).

Second, the usual definitions of personhood say that being a person amounts to having certain mental properties. Locke's is the best-known: a person, he said, is "a thinking intelligent being, that has reason and reflection, and can consider itself as itself, the same thinking thing, in different times and places" (1975: 335). There is at any rate wide agreement that having the right mental properties is sufficient, if not necessary, for being a person. (Perhaps a human foetus is already person, even before it acquires those mental properties.) If so, my body's being psychologically just like me would make it too a person--a second person distinct from me. It would have all the right mental properties. Some people would be their bodies. They would not go with the brain if it were transplanted, but stay behind with an empty head. Human people would come in two metaphysical species: those that are constituted by their bodies and have the special modal properties constitutionalists ascribe to us, and those that are the bodies of those people, and lack those modal properties. This would conflict with the claim that people are distinct from their bodies, and that a person would go with her transplanted brain: these things would be true only of "constituted" people. It would be like saying that people are male and not female.

Third, our bodies' being psychologically just like us would create an awkward epistemic puzzle. If I am one of two people (or two intelligent beings) now thinking my thoughts, how could I know which one I am? Suppose I were a constitutionalist, and believed that I should go with my brain if it were transplanted rather than just losing an important organ. If my body were psychologically just like me, then it too would be a constitutionalist, and would presumably believe that it would go with its transplanted brain. It would take itself to be a person constituted by a body, not a body constituting a person. And it would believe these things on the same grounds that I do. Our reasoning would be identical. Yet it would be mistaken in this belief. It appears to follow that for all I could ever know, I might be the one making the mistake: I could be the body. This would be no far-fetched sceptical scenario: at least half the human thinkers entertaining the thought would be mistaken in the same way. So even if I were the constituted person and not the body, it seems that I could never have any good reason to believe it, making the constitution view epistemically self-undermining.

Constitutionalists want none of this. They don't believe that there are twice as many conscious, intelligent beings as we thought, or that my body is a person, or that human people come in two metaphysical species. They don't worry about how I know that I'm not someone else's body. They do not see our bodies as our psychological equals.

But it would be baffling if our bodies had some of our mental properties and not others: if they had conscious experience but lacked the capacity for rational thought, say. There would be no neural difference to account for it, and it could

never manifest itself in different behavior. The usual constitution view is that our bodies have no mental properties at all.<sup>3</sup> As we shall see, however (§4), the consequences for the philosophy of mind would be similar if our bodies had only some of our mental properties.

It follows that according to the usual constitution view, our bodies are zombies: they are physically identical to us, yet lack all mental properties, including conscious experience.<sup>4</sup> What's more, <u>human organisms</u> are zombies. The reasons constitutionalists give for denying that we are our bodies are equally reasons for denying that we are organisms. No organism would go with its transplanted brain as a person would: the operation would simply move an organ from one animal to another. More generally, human organisms have different modal properties from the ones constitutionalists take us to have. It may be that our bodies <u>are</u> organisms: a person's body is the same thing as the organism associated with her. If not, the zombies will outnumber us at least two to one. ("At least" because I might coincide with a mass of matter or aggregate of atoms, in the way that a clay statue is said to coincide with a lump of clay (Burge 1975, Thomson 1998, esp. n. 14). Because neither a person nor an organism is a mass of matter, that would make the mass yet another zombie.)

Lynne Rudder Baker's constitution view is an exception to this, and deserves a brief comment (Baker 2000: 103). She says that our bodies are <u>self</u>-conscious only in the derivative sense of constituting us, who are self-conscious nonderivatively. But they are <u>conscious</u> nonderivatively. So our bodies are not zombies. We ourselves, though, are conscious only in the derivative sense of being constituted by our bodies. Does that make <u>us</u> conscious--not conscious derivatively or nonderivatively, but just plain conscious? If it does, then there are twice as many conscious beings as we thought, which Baker denies. If it doesn't, then we ourselves are zombies. But she wants to deny this too. Whether this is a coherent position is a question I cannot pursue here.

<sup>&</sup>lt;sup>3</sup>Lowe (1996: 1, 2010), Shoemaker (1999, 2008), and Johnston (2007: 55) say this explicitly. To my knowledge, the only constitutionalists who explicitly take our bodies to be psychologically identical to us are Hawthorne and McGonigal (2008), who see their view as unusual.

<sup>&</sup>lt;sup>4</sup>Shoemaker (1999, 2008, 2012) says that our bodies are physically identical to us only by sharing our "thin" physical properties, but differ from us in their "thick" physical properties. Thick properties give their bearers certain persistence conditions; thin ones don't. Because our persistence conditions differ from those of our bodies, he says, we cannot share any thick properties with them. The details of his account are a large topic. As most physicalists take the physical to consist of thin properties, and take any being identical to a person in its thin physical properties but lacking consciousness to be a zombie (a "thin zombie", we might say), I will set it aside.

3.

Why has no one noticed that the constitution view entails the existence of zombies? Why don't physicalists denounce it? Why don't constitutionalists reject physicalism? And why does no one argue against physicalism by telling stories about brain transplants, or about lumps and statues?

One reason is that mental properties seldom feature in debates over constitution. The central constitutionalist claim is that material things can coincide so that they are physically identical (intrinsically, relationally, and historically), yet modally different. The usual examples involve inanimate objects, and the debates are about such questions as whether statues might be essentially statue-shaped while the lumps coinciding with them are not (Johnston 1992, Burke 1992, Noonan 1993, Thomson 1998, Bennett 2004b). This may be why some constitutionalists appear to be unaware of their view's implications about mental properties (e.g. Kripke 1971: n. 19, Pollock 1989: 32-7, Sosa 1987).

Another reason lies in the fact that the zombie debates are primarily about the nature of phenomenal consciousness in particular, and not about the mental in general. The assumption is that if any mental property is not physical (in the sense relevant to physicalism), it's consciousness. So the debates are about whether consciousness is physical or nonphysical. But the zombies of the constitution view would have no mental properties at all. What makes them zombies has nothing to do with the nature of consciousness. Nor does consciousness play any special role in arguments for the constitution view. That view would tell us nothing about consciousness as such.

But the main reason why the zombies of the constitution view haven't been in the news is that physicalism is most often put in a way that is compatible with their existence. It is commonly stated in terms of global supervenience.<sup>5</sup> This comes in many variations, but the central idea is that the physical facts or truths entail all the facts or truths. Possible worlds that differ in any respect whatever must differ in some physical respect. Physically identical worlds are identical without qualification, and thus identical with respect to what beings are conscious and what their conscious experience is like for them. Once God decided everything to do with particles, forces, space, time, and physical laws, he would not need to decide anything further (Kripke 1980: 153f.).

This claim rules out the existence of the zombies of the physicalist literature--call them "ordinary zombies". They do not constitute conscious beings. If they were possible (consistent with the actual laws of physics), then there could be a zombie physically just like me, in physically identical surroundings (with the same physical laws)--a being that not only lacked consciousness, but did not even coincide with a

<sup>&</sup>lt;sup>5</sup>E.g. Jackson 1998: 12, Kirk 2005: 8f., Stoljar 2015: §3. More precisely, it is <u>weak</u> global supervenience. Strong global supervenience is (with some qualifications) equivalent to strong individual supervenience (see §4). For details, see McLaughlin and Bennett 2014.

conscious being. This appears to imply that there is a possible world physically just like the actual one, but where some of the locations actually occupied by conscious beings are instead occupied by zombies (ordinary zombies). Physically identical worlds would differ psychologically, contrary to the global-supervenience claim. That's why the possibility of zombies is taken to be incompatible with physicalism.

But the constitution view does not imply that there are or even could be any ordinary zombies. It entails only the existence of zombies coinciding with conscious beings--"constitution zombies". Most constitutionalists say that any world physically identical to this one will include not only your body, but also a conscious being constituted by it. If particles just like yours are arranged as yours are (in the same physical surroundings, if that's relevant, and with the same physical laws), they will inevitably compose both a body and a conscious person, just as clay particles arranged in the shape of Socrates (in the right surroundings) will inevitably compose both a lump and a statue. They can even take it to be a necessary truth that every zombie constitutes a conscious being, making ordinary zombies impossible.

So constitutionalists can allow that once God settles the physical facts, the existence of both constitution zombies and the conscious beings they constitute follows necessarily. The constitution view entails no differences between possible worlds that would interest philosophers of mind. It is compatible not only with the global supervenience of the mental on the physical, but with physicalism in general, stated as the claim that the physical facts entail all the facts, mental and otherwise. This, more than anything else, has kept constitution zombies out of the headlines.

### 4.

But even if the existence of constitution zombies implies no important difference between <u>worlds</u>, it entails momentous differences between <u>individuals</u>. To begin with, it rules out all familiar claims of individual or "local" supervenience of the mental on the physical--for instance:

### Weak psychophysical supervenience

Physical duplicates within a single world are always mental duplicates.

# Strong psychophysical supervenience

Physical duplicates, even in different worlds, are always mental duplicates,

where physical duplicates are things with the same physical properties and mental duplicates are things with the same mental properties.<sup>6</sup> Weak supervenience says

<sup>&</sup>lt;sup>6</sup>These formulations are loose, as they speak darkly of things existing in other worlds but not in the actual world. More carefully:

that a thing's physical properties fix its mental properties within a world. It rules out there being a physical duplicate of you that is not a psychological duplicate. It also rules out possible worlds where physical duplicates are psychologically different. But it allows that things' physical properties might correlate with different mental properties in different worlds. Strong supervenience rules this out. It says that a thing's physical properties strictly entail its mental properties.

It is evident that the existence of constitution zombies would contradict weak supervenence: your body would be a physical duplicate of you but not a mental duplicate. In fact weak supervenience would be false even if your body had some but not all of your mental properties--if it were conscious, say, but not self-conscious. And because weak supervenience follows from strong, the existence of constitution zombies would contradict strong supervenience as well. If God wanted to give a thing the power of thought or consciousness, it would not be enough for him to give it the right physical properties, even in the presence of the right laws of nature.

The reason physicalism is most often stated in terms of global rather than individual supervenience is not to avoid conflict with the constitution view or anything like it, but to account for extrinsic mental properties (Jackson 1998: 10 n. 11, Melnyk 2003: 70, Bennett 2004a: 507). The least controversial case involves so-called "wide content". Let the God of the philosophers create, ex nihilo, a physical duplicate of me as I am now. The thought is that although the duplicate would have some of my mental properties--a tired feeling and a dry sense of humour, for instance--he would have no beliefs about the moon, since he would not have had the right sort of causal contact with that object. He would merely have beliefs of uncertain content intrinsically identical to my lunar beliefs. So he would differ from me mentally, which appears to conflict with weak psychophysical supervenience. Even someone who was physically identical to me from cradle to grave might have beliefs with different content from mine as a result of a systematic difference in our surroundings--if, say, aluminum objects in my surroundings corresponded to molybdenum objects in his, molybdenum were called 'aluminum' in his language, and so on. This is taken to be compatible with physicalism. And it is consistent with global psychophysical supervenience, as it does not entail any psychological difference between physically identical worlds.

But individual supervenience can account for this just as well, if it includes

<u>Weak</u>: Necessarily, beings with the same physical properties have the same mental properties.

<u>Strong</u>: Necessarily, if a being has both physical and mental properties, it is impossible for any being to have those physical properties without also having those mental properties.

Kim (1993: 70) shows how to eliminate talk of merely possible beings in all such contexts.

extrinsic physical properties (Bennett 2004a: 507). My <u>doppelgänger</u> created <u>ex</u> <u>nihilo</u> would differ from me in his extrinsic (historical) physical properties: he would not have had his thought and speech affected by heavenly bodies in the way that mine has. And my cradle-to-grave <u>doppelgänger</u> would differ from me in his physical surroundings, which contain different metals. Although these beings would be intrinsic physical duplicates of me (one temporarily, the other permanently), they would not be physical duplicates <u>simpliciter</u>. Neither scenario would conflict with strong or weak individual supervenience of the mental on the physical thus broadly construed.

Most of those who call themselves physicalists would be just as happy to accept weak psychophysical supervenience, taken to include extrinsic properties, as the usual global-supervenience claim. (Strong supervenience is more controversial.) For that matter, most will accept these even weaker nonmodal claims:

## Psychophysical correlation

Beings with the same physical properties (both intrinsic and extrinsic) have the same mental properties.

### Probabilistic connection

There is a lawlike connection between the physical and the mental that gives things with the right physical properties a greater objective chance of having mental properties than things lacking those physical properties.

Yet all these claims are incompatible with the existence of constitution zombies. The constitution view says that your body is physically identical to you but lacks any mental properties, flatly contradicting psychophysical correlation. What's more, most constitutionalists say that it is impossible for a human body to have any mental property no matter what its physical makeup, contrary to probabilistic connection. And we have already seen the conflict between constitution zombies and weak psychophysical supervenience.

5.

The existence of constitution zombies would be of great interest to both friends and enemies of physicalism. But constitution zombies are not ordinary zombies, and their implications for the nature of consciousness differ from those that feature in the zombie debates.

Suppose there could be ordinary zombies. What would explain their lack of consciousness? What would be required, besides a thing's having the right physical nature, for it to be conscious? The most likely answer is the right laws of nature. The reason why ordinary human beings are conscious (supposing there are not actually any zombies) would be the holding of a contingent law stating that anything with the right physical properties will be conscious. The friends of

zombies insist only that it cannot be a physical law: physically identical worlds can differ as to whether it holds. If there were no such physical law, beings physically like us would not have to be conscious. That's what makes ordinary zombies possible. Consciousness, we might say, would be a natural phenomenon but not (or not entirely) a physical one.

Now suppose there were constitution zombies. To keep things simple, suppose that ordinary zombies are impossible. More strongly, suppose the following analogue of strong psychophysical supervenience:

Physical duplicates, even in different worlds, either are mental duplicates themselves, or coincide with beings that are mental duplicates,

where everything coincides with itself.<sup>7</sup> This is compatible with the constitution view. Now let us ask the analogous question: what would explain our bodies' lack of consciousness? What would be required, besides a thing's having the right physical nature, for it to be conscious?

In this case the answer has nothing to do with laws of nature. It is true that, given the actual laws, my body will coincide with a conscious being. In fact, any being with the right physical nature (both intrinsic and extrinsic) will necessarily coincide with a conscious being, no matter what the laws. The right physical state of affairs would be entirely sufficient for the occurrence of consciousness, and for its qualitative nature. But for consciousness to occur is for there to be conscious beings, and no law of nature would suffice (or even make it probable) for a being with the right physical nature to be conscious. My physical properties would make me conscious, but my body, despite having the same physical properties, could not possibly be conscious.

Why this difference? What would make me conscious and my body not? The constitutionalist answer is that I, but not my body, belong to the right metaphysical kind. There is little agreement about what this kind is. It might consist in having the right persistence conditions (Shoemaker 1999, 2008). Or perhaps there is no saying, in an informative way, what the kind is: it is simply being a subject of experience (Lowe 1996). In any event, there is a metaphysical principle linking consciousness with the conjunction of the right physical nature and the right metaphysical kind--something of the form:

Necessarily, a thing is conscious if and only if it has physical nature  $\underline{N}$  and belongs to metaphysical kind  $\underline{K}$ .

<sup>&</sup>lt;sup>7</sup>A more careful formulation not quantifying over merely possible objects: Necessarily, if any being has both physical and mental properties, then it is impossible for any being to have those physical properties without also either having those mental properties itself or coinciding with something that does.

What bridges the gap between a thing's physical nature and its being conscious is not a law of nature, but a metaphysical principle. We might put this by saying that consciousness is a metaphysical phenomenon and not (or not entirely) a natural one. And it would not be just consciousness that had this essential metaphysical ingredient, but mental properties generally, since according to the constitution view our bodies have no mental properties at all. (Or if our bodies lack only some of our mental properties, it will be those that are metaphysical rather than natural.)

It may be both that there are constitution zombies <u>and</u> that ordinary zombies are possible (a "zombie apocalypse"). In that case two conditions would need to hold for a thing with the right physical properties to be conscious: its belonging to the right metaphysical kind and the holding of the right laws. Still, the two conditions are different.

### 6.

Here are some further important implications of the constitution view. Consider "type physicalism" or "type-identity theory": the view that all mental properties ("types" or universals) are physical properties. To hope for rain, to feel worried, or to smell the scent of violets is to satisfy some physical condition. It won't be a simple physiological condition, of course--a certain neural configuration or the like. It will have to be a property that beings physiologically very different from us can have. It is likely to be some sort of causal or functional role that can be filled by different physical mechanisms: neural mechanisms in human beings, hydraulic mechanisms in Martians, or what have you (Lewis 1980). It is a high-level physical property that can be "multiply realized". But on the constitution view, mental properties could not be physical properties of any sort. My body would have all my physical properties--even high-level, multiply realizable ones--yet lack at least some of my mental properties. Some of those mental properties must therefore be nonphysical.

On most versions of the constitution view, our bodies have no mental properties at all. That would rule out even the weaker claim that <u>some</u> mental properties are physical. Suppose I hope for rain. If this were a physical property, my body would also hope for rain, since it shares all my physical properties. Yet my body is supposed to have no mental properties. It follows that hoping for rain cannot be a physical property--even a high-level, multiply realizable one. The same would go for all mental properties: they would be nonphysical every one. (Whether this applies to ordinary zombies depends on whether they can have any mental properties at all--whether they could have propositional attitudes, for instance, without being conscious. If so, the mental properties they can have may be physical.)

Most self-styled physicalists accept some version of type physicalism. Virtually all of them accept "token physicalism"--a doctrine not about mental properties or universals or types, but about particular mental states or events or "tokens".

Philosophers of mind take it for granted that if I have a headache, there is such a thing as the particular headache that I have. It is not a property that could exist without my having it or be shared with someone else, but a particular state essentially attached to me. According to token physicalism, that pain is a physical state. More generally, every particular mental state or event is identical to some physical state or event. This allows that the shareable property of being a pain, or being in pain, may be nonphysical, so that what makes my headache a pain is different from what makes it the sort of physical state it is: token physicalism does not entail type physicalism.

But the constitution view appears to rule out token physicalism too. If my headache is a particular physical state of me, then my body--this biological organism--will also be in that state. We are made of the same matter, and there is no physical difference between us. How, then, could we be in different physical states? That would be like saying that although my body and I are shaped exactly the same, we nevertheless have different shape tokens: I have one shape and my body has another shape just like it. That looks unintelligible. If there are such things as shape tokens, my body and I share the same one. And if there are such things as particular physical states, then my body and I share the same ones too. So it seems, anyway. But if my pain is a physical state, then my body is also in that state--that is, in a state of pain. It follows that my body is in pain and not a zombie. If my body is a zombie, then mental-state tokens cannot be physical-state tokens, contrary to token physicalism.

Ordinary zombies, by contrast, would not coincide with conscious beings, and thus need not share their physical states. Their possibility is consistent with token physicalism.

It's a safe bet that the constitution view has yet further implications for the nature of the mental. Philosophers of mind should take note.<sup>8</sup>

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