

The Obvious Argument for the Inconceivability of Zombies

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Draft! Comments welcome!

Abstract: Zombies are hypothetical creatures identical to us in behavior and internal functionality, but lacking experience. When the concept of zombie is examined in careful detail, it is found that the attempt to keep experience out does not work. So the concept of zombie is the same as the concept of person. Because they are only trivially conceivable, zombies are in a sense inconceivable.

1 Introduction

In this paper I argue that zombies are inconceivable, or at least only trivially conceivable, because the concept of “zombie,” a being that behaves exactly like a person but experiences nothing, turns out on reflection to be the same as the concept of “person.” The attempt to leave experience out fails.

I call this the “obvious” argument for two reasons:

1. I believe it’s the argument people are trying to articulate when they say, “It’s just *obvious* that zombies are inconceivable!”
2. The argument is lying out in plain sight. Philosophers stumble all over it, especially in recent years, and for some reason are afraid to pick it up.¹

A *zombie* is a being who is identical to a person but experiences absolutely nothing.² It will be convenient to distinguish between *bio-zombies*, which are physically indistinguishable from people down to the last telomere, and *f-zombies*, which are functionally indistinguishable but built out of different stuff or, more broadly, put together in a different way.

¹It turns out there are exceptions, notably (Lloyd 2013).

²I am not sure where the term originated, but the *idea* of beings that are functionally identical to people but experience nothing seems to have originated with Block and Fodor (1972).

Perhaps there are no f-zombies; perhaps bio-zombies are the only kind. That is, perhaps it's impossible to build a being functionally identical to a person without making it exactly the same way people are made. However, just in case f-zombies are possible, let me point out that they have to be *indistinguishable* from people; they would have to act as if they had the same emotions as people; they would have to believe they *were* people. You could meet one socially and not ever notice the difference. It's only if they were cut open and didn't bleed (or at least didn't bleed blood) that it would become clear that they weren't human.³ F-zombies have the same psychology as people, meaning that they are subject to the same psychophysical laws, and react like human test subjects on all tests that don't require physically invading the skull. No peeking either — fMRI's are not allowed. In other words, an f-zombie is required to pass some version of what Harnad calls the "Total Turing Test" (Harnad 2000), of middling difficulty.

Sometimes zombie scenarios are discussed in which they live among us. More often they are consigned to other planets, even other universes, with the same physical laws except for whatever it is that makes experience happen in this world. It is in these other universes that bio-zombies tend to dwell. These other worlds come in handy in capturing the widespread intuition that, while zombies may be nomically impossible, they are conceivable. The point has been argued most exhaustively by David Chalmers (1996,2002), but it is also endorsed by David Papineau (2002), Fred Dretske (2003), Ned Block (1980, 2002) — almost every philosopher. Dissenters include Sydney Shoemaker (1975), Michael Tye (2006), and Daniel Dennett (1991). See below.

"By conceivable" I mean "imaginable after thorough reflection."⁴ I grant that at first glance one can imagine a zombie. But only at first glance. Thorough reflection reveals an obvious problem: All the introspection about experience that we can do can also be done by the zombies. One might doubt whether zombies are really

³You presumably couldn't eat dinner with one, unless they could extract energy from food in roughly the way animals do.

⁴I think this is the same as what Chalmers (2002) calls "ideal positive primary conceivability," although his intuitions about zombies are diametrically opposed to mine.

capable of introspection, but they can certainly make verbal reports. You can even doubt that the noises coming out of zombies' mouths are truly speech, but if those noises eventually result in papers published in the zombie *Philosophical Review* it would be difficult not to attach some degree of interest to what the noises appeared to say. The noises might not be speech, but print is print.

In talking about the speech of zombies, I have run into a problem that could cause clumsiness in what follows. Every time I use a word that might have some tinge of phenomenality or intentionality, I will have to pause and issue a disclaimer. To save time, whenever I write “**w*” I mean “*w*, or the zombie ersatz version of *w*, with the usual disclaimers.” So I could have just written *introspection and the previous paragraphs would have been reduced to its first sentence. So let's start again.

The problem with the concept of zombie is that all the introspection about experience that we can do could be done by zombies, or at least they could do *introspection about *experience. They would *note the *perplexing explanatory gap between what they *knew of physics and what they *knew of *phenomenal *experience. They could come up with the knowledge argument (Jackson 1982; Jackson 1986); in their version the color-deprivation test would result in the subject *finding out what *seeing *colors was *like. Zombies would be absolutely *sure⁵ that they *experienced things, but they would speculate about creatures who behaved just as they did, perhaps were built out of the same materials, but *experienced nothing. They would even *call them “zombies.”

In other words, zombies are us, with asterisks.⁶

I think many philosophers accept the possibility of this (near-)match between our concept of “zombie” and our concept of “person.” For example, Papineau (Papineau 2007) describes what he calls “silicon zombies,” functional isomorphs of us built out of chips.⁷

Since silicon zombies are our functional duplicates, they will there-

⁵Maybe not absolutely, see below.

⁶I don't necessarily agree with *all* these asterisks. But I'm erring on the side of conservatism.

⁷In (Papineau 2002) these were called “silicon doppelgangers.”

fore have “phenomenal” concepts, functionally conceived, and these will mimic the operations of our own phenomenal concepts: silicon Mary will need to come out of her room to acquire a “phenomenal” concept of red “experience,”

. . . [T]he silicon zombies’ “phenomenal” concepts do successfully refer to a certain range of silicon mental properties —”schmonscious” properties—and . . . physicalists can say that the silicon zombies “phenomenal” concepts relate them to these schmonscious properties in just the way that our own phenomenal concepts relate to our conscious properties. . . . (After all, note that silicon zombie philosophers can point out that *we* lack something that *they* have, given that we lack the silicon-based makeup required for schmonsciousness. (Papineau 2007, p. 142).

Dretske uses the prefix “proto” to mark zombie *psychological states and events that are analogous to ours:

If pains are sensations we are necessarily aware of (and, of course, your pains are sensations you are necessarily aware of), then there must be something else, something that isn’t pain—call it protopain—that has all the properties you are aware of when you experience pain except for the relational one of your being aware of it. Protopain is what you have left when you subtract your awareness of pain from pain. . . . Zombies might be full of protopain, prototickles, protohunger, and protoimagery. (Dretske 2003, p. 5)

Chalmers just focuses on what zombies *talk *about:

. . . [W]hen I talk of a zombie’s judgment that he is having a red sensation, I am talking about *something* interesting in his psychology: at the very least, that my words can be taken to refer in a deflationary way to the judgment that he expresses with the words “I am having a red sensation” (or words with that sound!). I will talk about “claims” in a similar

way, abstracting away from all these subtle issues of content. (Chalmers 1996, pp. 142f)

... [M]y zombie twin in the universe next door ... talks about conscious experience all the time... He often comments on the pleasure he gets from certain sensory qualia, professing a particular love for deep greens and purples. He frequently gets into arguments with zombie materialists, arguing that their position cannot do justice to the realities of conscious experience.

And yet he has no conscious experience at all! In his universe, the materialists are right and he is wrong. (p. 180)

Papineau, Dretske, and Chalmers resort to different devices from mine to signal the “not really” flag that must be attached to every loaded word, but the drift is the same.

Before I dive into the details of my argument, let me pause to mention other attempts to show that zombies are inconceivable. Sidney Shoemaker (1975) began a debate about whether the causal closure of the physical make zombies inconceivable, with Ned Block (Block 1980) taking the opposing side. Rebuttals are to be found in (Shoemaker 1981; Tye 2006). Daniel Dennett has poured scorn (see especially chapter 10 of his 1991) on what he calls the “zombic hunch” (Dennett 1999). His arguments come down to the idea that the contents of qualia are exhausted by similarity judgments among them, and that these judgments can be explainable in functionalist terms.

The paper I am aware of that is closest to mine is (Lloyd 2013). Indeed, except for putting the asterisks at the other end of the words, it seems to make many of the same points. However, he phrases the conclusion in terms of the meaning of the asterisked language, “Zombish.” My conclusion is in terms of the concept of zombie vs. the concept of person; his, in terms of the language of zombies vs. the language of persons. I don’t disagree with his conclusion, but I think it can be stated in slightly stronger terms.

2 Beginning The Argument

What I would like to argue is

The concept of a zombie is when fully fleshed out just the concept of a person.

The argument is simple. The concept of a person is quite rich. To find the degree of overlap between some concept X and the concept of a person, you would have to explore a lot of dimensions. For example, if someone claimed a new robot model should have civil rights, we would want to know what its moral intuitions were, and whether it actually behaved the way it and we agreed people ought to behave. A proper examination could take a long time.

Fortunately, in the case of zombies we can short-circuit all this complexity. We already know that zombies will behave *morally to the same extent as the real person they are isomorphic to. Suppose in the zombie universe Zombie Harry, while parking his SUV in a parking garage, scrapes the fender of somebody else's parked van. It's not necessary to the scenario that zombies correspond one-to-one to people in the real world, but let's suppose there is a Harry, Zombie Harry's opposite number in our world. Both of them have to exercise their free will to decide whether to drive away or leave a note for the owner of the van, except in Z-Harry's case it's *free will. We need not wonder if they will behave differently. The probability of Z-Harry leaving a note is exactly the same as the probability that Harry would, because they're functionally identical. (Whether they're ever in identical parking garages depends on whether we want the zombie world to be an exact duplicate of ours, i.e., a Zombie "twin Earth.")

A zombie might listen to music, get gooseflesh and a *tingle at its incredible *beauty, and wonder about the *conceivability of *zombies. This is an important point, that zombies have no *idea that they're zombies; they *believe they *experience things, but many *believe it's *conceivable there could exist beings who were functionally just like them but didn't really *experience anything. Or, as in Papeineau's tale, two communities, the real people and the f-zombies, live side by side,

us wondering whether they have consciousness, them *wondering whether we have *consciousness.⁸

The only difference between us and them is the asterisks, when you come down to it, and yet it's difficult to put your finger on the difference the asterisks make. Phenomenal realists (Block 2002) will say that it's easy — it's the experiences. But zombie phenomenal realists *say the same thing — “It's the *experiences.”

Now some philosophers in each of these universes or trading associations might begin to have a crisis of faith. “How do I know that *my* version of consciousness is real?” they would ask. “After all, everyone else is certain that *theirs* is real, with the same sort of evidence I do, except with different numbers of asterisks — but no one can agree on where to put the asterisks!” It's a little bit like Europe in the seventeenth century, before the Treaty of Westphalia, when wars were fought over who had the right theory of God.

But I'm not trying to make an argument from analogy to religious faith, hoping its bad reputation in academic quarters will rub off on the concept of zombie somehow. What I'm trying to do is point out that, no matter how far down you go in the concept of zombie, you find yourself in some department of the vast concept of person. Literature? There could be a zombie Dante. Sadism? There could be a zombie Sade. Qualia skepticism? There could be zombie *qualia *skeptics. There are zombie philosophers who *see no *reason why they couldn't be *zombies, just as I see no reason why I couldn't be a zombie.⁹

The only element that is missing is experience, the real, unadulterated-by-asterisks thing. But there seems to be plenty of *experience, experience*, schmon-consciousness, and such. So in what sense is the element of experience missing from the *concept* of zombie? Clearly, the indignant zombie realist says, it's missing by *stipulation*. The problem is that it's easier to stipulate something *in* than to stipulate

⁸You could have a cycle of four groups that traded bilaterally, each wondering whether their trading partners' versions of “consciousness” were the real thing, each being unaware of more than two neighbors.

⁹This doubt sets limits, alluded to on p. 3, to the absolute *certainty of zombies that they *experienced things.

something *out*. Consider the concept of “*clean coal*,” which is just like regular coal, except that burning it produces no icky air pollutants. The problem is that nature will supply what you’ve tried to leave out.

An example closer to home might be this old joke:

Mutt: “Studies show that most injuries in railroad-train accidents occur in the last car in the train.”

Jeff: “Then why not leave that car off?”

Stipulating the last car out won’t work for obvious logical reasons. Showing how experience keeps popping up requires a subtler line of reasoning.

Here’s an analogy that I think will help show the structure of the argument, and be more faithful than the farm or the train examples. The analogy is to the externalist strategy in the philosophy of mind. Externalism starts with the world as revealed by science, and attempts to locate mind within that world. The internalist objects that the we cannot *get* to the “external world” without solving all the traditional problems of epistemology first.

The contrasting projects will formulate the central philosophical problems about knowledge and the mind in quite different ways. For the internalist, the central question about intentionality, for example, is this: how can my representational capacities extend beyond my own mental life? I can take for granted, without explanation, my capacity to reason about what I find there. . . . The problem is to explain how I extend my representational reach beyond this. (Stalnaker 2008, p 3)

Internalism’s classical skeptical problem is how to refute skepticism and solipsism. Externalism refutes it by finding, in the scientific image of the world (Sellars 1962), an entity that answers to the description of the internalist’s own mind, namely, the mind that cognitive science explores inside the internalist’s skull. This entity the internalist will demand we call her \$mind, because the real thing is still back in her Cartesian cell; the “\$” mark plays the role here that asterisks play in the zombie scenario, of flagging something that isn’t really what the label says, but

for which other words are lacking. But, assuming cognitive science continues to succeed,¹⁰ more and more of the properties of the internalist's mind will be mirrored in that \$mind inside her skull. Perhaps a super-brain-o-scope will be invented that allows her to track \$her \$thoughts in real time; if they match up with her thoughts, she would be forced to admit, or at least have strong evidence in favor of admitting, that the \$mind *is* her mind.

The structure of my argument is not, of course, quite the same. The externalist claims that the scientific-image \$mind and the original mind are numerically identical. I am not arguing that zombies are people (let alone that zombies are us). What I am claiming is that the *concept* of zombie is the same as the *concept* of person.

Let's start with Ned Block's (1980) concept of "ersatz pain." The phrase suggests pain is a substance. But remember to keep in mind that every instance of pain is a state or event of a type that plays a certain functional role. An ersatz pain is a state or event of the same type, except that it is unaccompanied by the feeling of pain. However, it exhibits all the following properties:

1. It instills a strong *desire that it stop.
2. It has a degree, from trivial to *agonizing.
3. It tends to *distract, that is, grab the *attention of, the agent in which it occurs. The higher the degree, the harder it is not to pay *attention to.
4. It forms part of the social interaction known as "torture," in which agent A is in a position to inflict *pain on agent B, and offers¹¹ to refrain from doing so in return for some behavior on the part of agent B.
5. It is *felt as occurring in some part of the body of the agent. The part may be hard to pin down ("somewhere in the knee area"). It may also be in parts that are only *imagined to be part of the agent's body, such as phantom limbs.

¹⁰Assuming for the sake of argument that it is succeeding.

¹¹Whether psychological terms used for agent A should get asterisks depends on whether A is a zombie.

6. It has an existence over time. It's a somewhat vague issue whether we think of a throb as a pain event, or a temporal sequence of pain states. But in any case it comes and goes (and is often repeated).

If you could visit the zombies, how would you tell them what they were missing? The conversation might go like this:

You: I hate to tell you this, but your inner life is empty. You're not really experiencing anything!

Zombie: Oh, my, you mean, if I were like you colors would be more vibrant, pain (but orgasm too) would be more intense, food would taste better, and so forth?

You: No.

Zombie: Would Brahms *sound more *beautiful?

You: Does Brahms *sound *beautiful to you now?

Zombie: Yes.

You: Then no.

Zombie: If I had said "No" would your answer be different?

You: No. No. All those things would *seem exactly the same, or rather, the way they *seem now is exactly the way they would seem if you could really experience them.

Zombie: Say that again?

You: Huh? Oh, I see the confusion. The asterisks were silent.

The zombies react just as you would if a visitor from another dimension told you there was some huge component missing from the way you experienced things; some huge but undetectable component.

I've granted for the sake of argument that the zombie experiences nothing. It's just that its *beliefs about what it experiences are just like a person's. It's possible that a zombie could be *convinced that it experienced nothing, but then again, it's possible to convince a person that they experience nothing. Here as elsewhere the missing experience just doesn't get a grip on anything.

Zombies don't see blankness and guess where things, are as blindsight patients do (Weiskrantz 1997). There are *blind zombies, although the asterisk seems odd

here. But it's needed because it's wrong to say that all zombies are blind already. If they were, they would *believe completely different things about colors and their interrelationships. As it is, *sighted zombies can stand in front of a Rothko and *ooh and *ahh at his handling of color, just like everybody else, and would be *incredulous or *indignant at the thought they were *experiencing nothing.

3 Completing the Argument

We can collect information on other ersatz experiences, and in each case we find the curious phenomenon that, except for the asterisks, we seem to be describing real experiences.

Every way one can experience something (vision, hearing, proprioception, touch, smell, taste, sexual contact, mood, imagination, propositional attitude, nostalgia, excitement, ...) is matched in the zombie world by states and events that are functionally identical. By "functionally identical" I mean they connect to sense organs, effectors, and other internal states and events in a way isomorphic to the way the corresponding states and events of a person connect to sense organs, effectors, and other internal states and events.

We're told that it is pointless trying to imagine what it's like to be a zombie. It's not like anything. But zombies have robust *beliefs about *each other's* *minds. They have *beliefs about the contents of their *visual *fields and other *sensory *fields. Is it like something to be an entity that *believes there's something it is like to be it? (Presumably that last phrase needs an asterisk somewhere, but I defer to someone else to place it.)

Hence the concept of zombie *does* include something that matches experience in every respect, except for the asterisks decorating the roll call of most of its properties. "Experience" is just a bucket term for conscious perceptual states and events; as we go through the list (but we needn't actually go through it, do we?), we find zombie versions of all of them.

Let me give a different example that, I think, matches the zombie case pretty well. Imagine that there was a community of people who believed that paper dollars

had intrinsic value; for all I know, there actually is such a group. That is, over and above the way people treat dollars, according to this community, dollars have real worth. This real worth *accounts* for people's attitude toward dollars. And now suppose they imagine a "z-money" world in which dollars do *not* have intrinsic value, but the attitudes and behavior of people toward dollars are exactly the same as in the real world where (according to the intrinsic-money faithful) money does have intrinsic value.

By stipulation, the intrinsic value of money is missing from the z-money world. But this stipulation does not succeed. The intent is to create a "hole" in the visualized world, a hole that is precisely the "shape" of the concept of value, but is empty. (In our world, the community thinks, the hole is filled, meaning that there is no hole.) The problem with this mental exercise is that the hole in the z-money world is filled by what we might call *V, the value people *attach* to money. Their greed or generosity in the z-money world is (by hypothesis) exactly the same as in our world. If they think they are winning big by raking in a lot of z-money in a poker game, or doing good by giving a z-dollar to a beggar, they are creating an entity *V with exactly the properties real intrinsic value is supposed to have. So in fact there can be no z-money world; or rather, there is no real difference between the z-money world and the intrinsically-valuable-money world.

By the same token, in the zombie world there is an experience-shaped hole, but there are also states and events that fill it exactly.

In attempting to explicate the concept of zombie, we end up with a network of concepts (*belief, *desire, *perception, ...) that all have asterisks because of the absence of experience, but we also have what we might for convenience label *E, the states and events that underlie *perception, *will, *pain and *pleasure, and all the other categories that get asterisked.

At first blush, it seems completely absurd that *E could have all the properties of experience. But it is impossible to put your finger on a single property that one has and the other doesn't. As Dretske puts it

I'm not asking whether you know you are not a zombie. Of course

you do. I'm asking how you know it. The answer to that question is not so obvious. Indeed, it is hard to see how you can know it. . . . [N]othing you are aware of, external or internal, . . . tells you that, unlike a zombie, you are aware of it. Or, indeed, aware of anything at all. (Dretske 2003, p. 1)

The problem is easy to see: Any evidence you can have, any piece of reasoning you can do that shows you have real experience a zombie can duplicate, thereby showing they have *E. Any observation you can make of experience, or of yourself having an experience, a zombie can mimic, *observing parallel things. There is no point a zombie can reach where they become *aware that something is amiss in their world.

Chalmers attempts to meet a similar objection¹² thus:

“[I]ntuitively, our access to consciousness is not mediated at all. Conscious experience lies at the center of our epistemic universe. We have access to it *directly*.” (Chalmers 1996, p. 196)

The problem is that a zombie could be dead *certain that this *argument *worked for them.

Perhaps the difference between experience and *experience is that if a person speculates that they actually experience nothing, they will be incorrect; whereas if a zombie *speculates that they actually experience nothing, they're right. But we're not allowed to yank the asterisk off that last occurrence of “experience.” All the zombie can *speculate is they *experience nothing. The whole system of asterisks was introduced to make sure that the abilities of zombies were not exaggerated. So, is the zombie correct when they speculate that they *experience nothing? No. If they succeed in referring to anything, it is to the entities under the rubric *E. And these entities do exist.

¹²He is attempting to deal with what he calls the “paradox of phenomenal judgment,” that “consciousness is *explanatorily irrelevant* to our claims and judgements about consciousness” (Chalmers 1996, p. 177). The quote is apropos because the paradox may be rephrased as: Our phenomenal judgments would be duplicated by zombies.

Hence, zombies are inconceivable because they are supposed to be different from people, and they are not. The concept of zombie is the same as the concept of person. There is no property you can point to that one has and the other doesn't.

Another argument might be supplied by an observation of Ned Block's, that the concept of antimatter and the concept of matter are the same, but that doesn't make antimatter the same thing as matter.¹³ Suppose I grant the point. Let me define a *qerson* as a being exactly like a person in every respect but one: they are not persons. (Persons are like qersons in every respect except they are not qersons.) If some qersons showed up (perhaps this is unlikely) I would have to grant they were not persons. However, all I am trying to show is that the relation between the the *concepts* of zombie and person is in the end the same as the relation between the concepts of qerson and person. Imagine zombies all day long; write novels of Tolstoyan proportions about them. You will never winkle out a property that distinguishes them from persons except that they are not, in the end, persons.

The final objection to my argument is that all of the evidence for *E is behavioral: the word-like noises zombies makes, the grimaces they pull, the moans that issue from their lips, and so forth. Isn't it rank behaviorism to suppose that all this is equivalent to experience?

But if this is what you think then you have misunderstood my argument in two ways:

1. I have assumed that zombies are like people on the inside as well as the outside. Bio-zombies are like people "all the way in," whereas f-zombies are like people only down to the flows of information within them. Either way, every relevant event that happens inside us when we experience things is matched with great precision to an event of the same sort within them.
2. I have not begged the question by assuming that all these events are equivalent to experience. I have merely invited you to find a way in which any of them differ, in hopes of finding a difference in the *concepts* of zombie *pains, *hopes,

¹³His actual example [[where was this?]] was positron vs. electron.

etc. and real pains, hopes, etc. I don't require you to accept that the collective called *E is experience, only that it has every property that experience has.

It trivializes behaviorism to equate it with the requirement that everything true be explainable in terms of states and events observable to everyone — “third-person-observable.” I plead guilty to accepting this requirement. *I have to accept it*, to avoid begging the question; I can't just assume the zombies have a first-person point of view. But they do turn out to manifest every observable property of having a first-person point of view.

So my conclusion stands that zombies are inconceivable, or rather, they are not conceivable in any nontrivial way.

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