HOW DO YOU KNOW YOU ARE NOT A ZOMBIE?*

Fred Dretske

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. Wittgenstein (1921/1961: 57) didn't think he saw anything that allowed him to infer he saw it. The problem is more serious. There is nothing you are aware of, external or internal, that tells you that, unlike a zombie, you are aware of it. Or, indeed, aware of anything at all.

1. VERIDICAL PERCEPTION

To better understand the problem assume--what you probably already believe anyway--that when you open our eyes, in perfectly normal conditions, you see physical objects: people, trees, and houses. Your awareness of these objects is not mediated by more direct awareness of mental particulars--e.g., sense data, impressions, ideas. Watching your son do somersaults in the living room is not like watching the Olympics on television. Perception of your son may involve mental representations, but, if it does, the perception is not secured, as it is with objects seen on television, *by* awareness of these intermediate representations. It is the occurrence of (appropriately situated) representations in us, not our awareness of them, that makes us aware of the external object being represented. Call this *direct realism*, and assume, for the moment, that it is true.

In normal (i.e., veridical) perception, then, the objects you are aware of are objective, mind-independent, objects. They exist whether or not you experience them. It follows that the properties you experience when you perceive these objects, if they are properties of anything, are properties of mind-independent objects. The properties you are aware of are properties of--what else?--the objects you are aware of. The conditions and events you are conscious of--i.e., objects having and changing their properties--are, therefore, completely objective. They would be the same if you weren't aware of them. Everything you are aware of would be the same if you were a zombie.[1] In having perceptual experience, then, nothing distinguishes your world, the world you experience, from a zombie's. This being so, what is it about this world that tells you that, unlike a zombie, you experience it? What is it you are aware of that indicates you are aware of it?

Perceptual experiences (we hope) carry information about what you are aware of but this is quite different from carrying the information that you are aware of it. It is important to keep this distinction--the distinction between the *content* of awareness and the *awareness* of content--in mind when thinking about how we know we are conscious. As Burge (1988, 1996) and Heil (1988) argue, knowing what you think is easy because the content of the lower-order thought--that, for example, there is beer in the fridge--is automatically embedded in the higher-order thought whose content is that you think there is beer in the fridge. So if you are not a zombie, if you think (and think you think) at all, you don't have to worry about how you know *what* you think. You think whatever you think you think, and this is so in virtue of the fact that what determines what you think you are thinking is whatever you happen to be thinking. Our question, though, is not a question about content. It is not a question about how we know, in the case of thought, what we are thinking. It is a question about how we know we are thinking it--a question about the attitudinal aspect of thought (see Bernecker 1996, Dretske 1995). It is a question about how one gets from what one thinks--that there is beer in the fridge--to a fact about oneself--that one thinks there is beer in the fridge. What you see--beer in the fridge--doesn't tell you that you see it, and what you think--that there is beer in the fridge--doesn't tell you that you think it either.

What makes us so different from zombies are not the things (objects, facts, properties) we are aware of but our awareness of them, but this, our awareness of things, is not something we are, at least not in perceptual experience, aware of. So if you are, as you surely are, aware that you are not a zombie--aware, that is, that you are aware of things--what is it you are aware of that tells you this?

Perception, broadly construed, certainly provides information about the self. As we move around there is, in vision for example, "self specifying" information (Gibson 1979). This enables you to see where you are going (a fact about yourself) without seeing yourself. There are, in addition, proprioceptive systems that provide information about the body, information about pressure, temperature, posture, balance, fatigue, position, and so on. These sources of information about the conscious self, however, supply information about the embodied self, the vehicle of consciousness, not information about its consciousness. Zombies, after all, have bodies too. They move around. They lose their balance. A zombie's arms and legs, just like ours, occupy positions. Their muscles get fatigued (zombies are not exceptions to the laws of thermodynamics). So the conditions we receive information about in proprioception, just like the conditions we receive information about in exteroception, do not indicate that we are not a zombie. These sources of information don't tell us whether we actually perceive, whether we are conscious of, those conditions of the body we receive information about.

[2]

It is true that besides seeing objects in the world you see these objects from a point of view. There is a perspective we have on the world, a "boundary," if you will, between things we see and things we don't see. And of the things we see, there are parts (surfaces) we see and parts (surfaces) we don't see. This partition determines a point of view that changes as we move around. Since zombies don't have points of view, it may be thought that this is our way of knowing we are not zombies. Although everything we see exists in the world of a zombie, what doesn't exist in the world of a zombie is this egocentric partition, this boundary, between things (and surfaces) we see and things (and surfaces) we don't see, and the fact that there is, for us, this point of view, this perspective, is what tells us we are not zombies.[3]

Points of view, perspectives, boundaries, and horizons certainly exist in vision, but they are not things you see. You don't see them for the same reason you don't feel the boundaries between objects you touch and those you don't. Tactile boundaries are not tactile and visual boundaries are not visible. There is a difference between the surfaces you see and the surfaces you don't see, and this difference determines a "point of view" on the world, but you don't see your point of view. That is not an additional object you are (visually) aware of anymore than tactile boundaries are additional objects you feel. You may, of course, be aware that you have a point of view just as you are aware that there are tactile boundaries. You may know (and in this sense be aware of) this fact. But awareness of the fact that you have a point of view does not tell us how you know you have a point of view. It merely restates (using the words "aware that") that you know it. We still haven't been told how you know it. If the things you see don't tell you, what is it that makes you aware of the fact that you see (hear, feel, etc.) some things and not others?

The fact that you can, up to a point, choose what you see (feel, hear) and when you see (feel, hear) it is of no help. Opening and closing your eyes makes a difference, it is true, but the difference it makes it not a difference in *what* you see. It's a difference in your seeing it. You are, to be sure, aware of this difference, aware that a change takes place when you open and close your eyes, but this, once again, is exactly the piece of knowledge whose source is in question. How do you know you see things when your eyes are open but not when your eyes are closed? It cannot be *what you see* that tells you because what you see when your eyes are open (e.g., the morning newspaper) doesn't depend on your seeing it. The newspaper remains the same when you close your eyes.

One must be careful here to distinguish the difference between two kinds of difference, the difference between:

(a) feeling (seeing, hearing, etc.) x and
(b) not feeling (seeing, hearing, etc.) x

and the difference between:

(c) feeling x (glass, say) and
(d) feeling y (sandpaper, say)

When you feel the difference between smooth glass and rough sandpaper, this is a difference you actually feel. A tactile difference. The difference between feeling smooth glass and not feeling it is not a difference you feel. It is not a tactile difference. You can describe how you know that the texture of glass is different from the texture of sandpaper by saying you felt the difference. You come to know that they differ by actually feeling the difference. But that can't be the way you know that there is a difference between feeling glass and not feeling glass. That is a difference you can't feel. So if you know that there is, for you, a difference between feeling and not feeling things--and, therefore, that you, unlike a zombie, sometimes feel things--we still need an answer to how you know this.

We are left, then, with a preliminary conclusion: there is nothing we perceive that tells us we are conscious. This conclusion may seem obvious--especially when we remember that it was reached by assuming perceptual realism. It is obvious. Once you think about it. But we have a tendency not to think about it. We have a tendency to suppose that merely being aware of objects--seeing, feeling, and smelling them--is, by itself, enough to make us aware of the fact that we are aware of them and, thus, conscious.[4] It isn't. If you know you are not a zombie, the fact that you are not a zombie, the fact that you are actually conscious of things, is not how you know it.

2. OBJECTS WE ARE NECESSARILY AWARE OF.

Yes, but not all experience is veridical. There are illusory experiences: hallucinations, dreams, and after-images.[5] Maybe the dagger I see exists, and exists pretty much as I see it, in a zombie's world, but the "dagger" Macbeth experienced doesn't. He was aware of something that could not exist in a zombie world since if he were a zombie, what he experiences--that mental image, that "false creation"--would not exist. Not only are there

illusory experiences, there are bodily sensations. Each of us has, and each of us knows we have, headaches, itches, tickles, feelings of anger, fear, hunger and thirst. These are sensations that zombies do not have. Zombies might (depending on the kind of zombies we imagine) exhibit the symptoms of pain--they might groan, hold their head, and take aspirin--but they don't feel pain. They may also, in some dispositional sense, be thirsty (i.e., exhibit a tendency to drink after periods of deprivation), but they don't feel thirsty. We do. And we know we do. That, surely, is how we know we are not zombies.

Many will find this argument convincing. So did I a year ago. But I no longer think it works. What we are looking for, remember, is a way of knowing that, unlike zombies, we are conscious of things. The argument just given shows that there are things we are aware of that zombies are not, things we feel that zombies do not, but it doesn't tell us how we know that, unlike zombies, we are actually aware of--i.e., actually feel--these things. It may turn out that what we are aware of, what we feel, when we are in pain or thirsty are things of a sort that also occur in zombies. Zombies just aren't aware of them.

I will be told that pains, tickles, and feelings of thirst are--by definition, if you will--mental events that are necessarily conscious. Maybe a person can be thirsty without being aware of it, but an unconscious person can't feel thirsty. Feelings are like pains. If you aren't aware of them, they do not exist. Feelings are felt, and feeling x is being conscious of x.[6] Reid (1785) and Shoemaker (1986) surely speak for many when they insist that being in pain and feeling pain are one and the same thing. It is just nonsense to talk about pains we (or zombies) are not aware of. If we (or they) aren't aware of them they aren't pains.[7]

Tickles and other bodily sensations are the same. They are mental events that we are necessarily conscious of. Anyone who has had an itch or a tickle has experienced something that can only exist in a conscious being, a being who is, in particular, conscious of the itch or tickle. *That* is how we--those of us who have itches and tickles--know we are not zombies.

But the fact--if it is a fact, and I'm willing to grant that it is--that we are necessarily conscious of our own pains and tickles, our own feelings of anger, fear, and hunger, our own imagery, doesn't help with our problem. It merely changes the way the problem is posed. If awareness of x doesn't tell you that you are aware of x--as your awareness of trees and people doesn't (see §1)--awareness of x when x is something one is necessarily aware of isn't going to tell you either. If a pain (itch, tickle, visual image) is an object (state, event, process[8]) one is necessarily aware of, then it certainly follows that if one is in pain (has an itch or a tickle), one is not a zombie.

This, though, merely invites the question: how does one know it is pain (an itch, a tickle) one feels? What is it that tells you that what you feel in your tooth is something you feel in your tooth, something you are actually aware of, and not the sort of thing that can occur, without being felt, in the tooth of a zombie.

To understand the problem here, think about *crocks*. Crocks are, by (my) stipulative definition, rocks you (not just anyone, but you in particular) see, rocks that, therefore, you are (visually) aware of. When you see a crock, then, there is something you are aware of--a crock (i.e., a rock you see)--that could not exist if you were not conscious of it. There are no crocks in zombieland. There can't be. So when you see a crock, there is something you are aware of--a crock--that depends for its existence on your being aware of it. If you closed your eyes, lost consciousness, or became a zombie, crocks would vanish.[9] To echo both Reid and Shoemaker: crocks and your awareness of crocks are one and the same thing.

So if our itches and tickles--things which cannot exist if we are zombies--are an answer to our question, so are crocks. You know you aren't a zombie because there are things, crocks, that could not exist if you were a zombie.

It should be clear, though, that crocks are not an answer to our question. So neither are itches and tickles. The reason crocks are of no help is that there is nothing about a crock that tells you it is a crock. Crocks, after all, look much the same as--in fact, they are absolutely indistinguishable from--rocks. Saying how you know you are not a zombie is just a way of saying how you tell crocks from rocks. The same is true of pains (itches, tickles, etc.). 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. Protopain is to pain what rocks are to crocks. Subtract your awareness of a crock from a crock and you are left with a rock. Subtract your awareness of a pain from a pain and you are left with a protopain. And just as rocks, but not crocks, inhabit the world of a zombie, protopain, but not pain, occurs in zombies. Zombies might be full of protopain, prototickles, protohunger, and protoimagery. Lacking consciousness, though, they aren't aware of them. As a result, these internal objects do not qualify as pain, tickles, hunger, and imagery. Since protopain has exactly the properties you are aware of when you feel pain (just as rocks have the properties you are aware of when you see a crock), protopains are as indistinguishable from pain as are rocks from crocks. So we come back to the question: how do you know it is pain you feel and not merely protopain?

This talk of protopain (prototickles, etc.) may sound like a philosopher's gimmick, but it is merely a way of dramatizing the difference between the act and the object of awareness, a distinction that lies at the heart of (what I regard as) a plausible theory of sensation (see, for example, Armstrong 1961, 1962; Dretske 1995; Lycan 1996; Pitcher 1971; Tye 1995). This theory regards pain (and other bodily sensations) as representations of bodily conditions. Pain, for instance, is awareness of injury, stress, or irritation to some part of the body. On this view of pain, what I am calling protopain is simply the bodily condition we "perceive", the physical condition we are made aware of, when we are in pain. Pain is our awareness of protopain and is, therefore, necessarily conscious in the sense that pain cannot occur without consciousness (of protopain). These bodily conditions, these protopains, these internal objects of awareness, however, occur in zombies as well as in us. Zombies just aren't aware of them. They don't feel them. Neither do we under anesthesia.

I have had impatient people react to this argument in the following way. Look, when I am in pain I cannot (like a zombie) simply be having a proto-pain since if I were, I wouldn't be in pain. But I am in pain. And I know it. So I'm not a zombie.

I agree you are not a zombie. I also agree that you know this and know, therefore, that the pain you feel is genuine. It is not just protopain. But that has never been in dispute. The question, remember, is not whether you know any of this, but how you know it. If there is nothing that distinguishes these objects of awareness, your pain from your protopain, except the associated (with pain) act of awareness, there is nothing you are aware of when you feel pain that tells you it is pain you feel and not merely protopain. That is the problem, and mere insistence that you know you are in pain isn't an answer to how you know it. I also agree that there are things that exist, and you know they exist, in your garden--viz., crocks--that couldn't exist if you were a zombie, but that doesn't tell me how you know you are not a zombie. Not unless you can tell me how you know there are crocks in your garden.

Taking a cue from the discussion above (where pain was identified with an awareness of protopain), it may be objected that my rock/crock analogy misrepresents the phenomena of bodily sensations. It isn't that pain stands to protopain as crocks stand to rocks. Pain isn't the thing we are aware of when we are in pain (as crocks are the rocks we are aware of when we see a rock). A better analogy would compare pain not to the object of awareness, the thing we are aware of when we are in pain, but, rather, to the act of awareness. Pain is our awareness of something (of a bodily condition?) an awareness of which is the pain. On this picture of things, the analogy looks more like this: pain stands to protopain (whatever we are aware of when we are in pain) in the way our awareness of rocks stands to rocks. Just as it is easy to distinguish our awareness of rocks from rocks (unlike a crock, an awareness of a rock doesn't look at all like a rock) it is easy to distinguish pains (awarenesses of protopain) from the protopains that exist in zombies. If we adopt this model, then, being aware of pain is awareness of something (it is the awareness of an awareness of protopain) that does not exist in a zombie. It not

only does nont exist in a zombie, it is easily distinguished from the protopains that might occur in zombies. Maybe *that* is how we know we are not zombies: we are aware of our own awarenesses of things.

3. AWARENESS OF AWARENESSES.

If objects one is necessarily aware *of* (e.g., crocks) isn't the answer, then maybe objects that are themselves awarenesses (of other things--e.g., rocks) will do the trick. We see things. Zombies don't. We have experiences of things. Zombies don't. These experiences occur in us. There is, therefore, something in us that does not occur in zombies. Even if we are not *always* (and not *necessarily*) aware of these experiences, maybe we are, in introspection, sometimes aware of them. Maybe, that is, we are sometimes aware of our own awarenesses (of external things) and, thus, aware of the very thing (or one of the very things) that distinguishes us from zombies. [10] If we are not only aware of rocks (i.e, crocks), but, sometimes at least, aware of our own awareness (experience) of rocks (the property that makes a rock a crock) then we would be aware of something (our experience of rocks) that distinguishes us from a zombie and (unlike a crock) is easily distinguished from the object (the rock) we are aware of at the perceptual level. If this is so, then one way of knowing we are not zombies is by such higher level, introspective, awareness of our own conscious experiences.

In one sense, a perfectly trivial sense, introspection is the answer to our question. It has to be. We know by introspection that we are not zombies, that we are aware of things around (and in) us. I say this is trivial because "introspection" is just a convenient word to describe our way of knowing what is going on in our own mind, and anyone convinced that we know--at least sometimes--what is going on in our own mind and, therefore, that we have a mind and, therefore, that we are not zombies, must believe that introspection is the answer we are looking for. I, too, believe in introspection. That is because I know--or think I know--I have thoughts, experiences, and feelings. It is because I know--or think I know--that I am not a zombie, that I am aware of things. So, if I really do know what I think I know, there must be a way I know it. That--whatever it is--is what we call introspection.

This much, I say, is indisputable. I'm certainly not disputing it. The problem I have is, once again, not whether we know we are not zombies, but how we know it, how we become aware of this fact. What objects, and what properties of these objects, are we aware of that makes us aware of this fact. Do I know that I am aware of things in something like the way I know by perception, by "outer sense", that there is beer in the

fridge--by seeing or feeling--or, if "seeing" and "feeling" are the wrong words for introspective awareness, by awareness of the internal experiences themselves? The way (or one of the ways) I find out there is beer in the fridge is by seeing, becoming (visually) aware of, the beer itself. I look in the fridge. I see an object--the bottle of beer--and then, by awareness of some of its revealing properties (those that reveal it to be beer) I become aware of the fact that there is beer in the fridge. I have learned that bottles of beer (and, generally speaking, only bottles of beer) look thus-and-so. Since there is something in the fridge that looks thus-and-so, I conclude (and say that I see) that there is beer in the fridge. If I don't see the beer for myself, I become aware that there is beer in the fridge (this fact) by awareness of some other object (a telltale sign, a photograph, an eyewitness report) whose features and/or behavior indicate (depend on there being) beer in the fridge. Knowledge (awareness) of external facts always depends on (perceptual) awareness of external objects and their revealing properties.[11] Telling someone how we know a fact is telling them what objects, and what properties of these objects, we became aware of that revealed this fact to us. The way I know that there is beer in the fridge, that gas is escaping, that the wine is sweet, and that the piano needs tuning, is by seeing, hearing, smelling and tasting the objects--typically (when the knowledge is direct) the beer, the gas, the wine, and the piano--that "tell me" (by their revealing properties or behavior) that things are the way I take them to be. It is my experience (visual, auditory, gustatory, olfactory) of these objects that "makes" me aware of the facts. Is this the way introspection is supposed to provide an answer to our question? Do we become aware of the fact that we are aware of things, the fact that we are not zombies, by awareness of the very objects--our conscious experiences--that constitute consciousness?

In asking how you know you are not a zombie, we have to remember that I, too, know you are not a zombie. I, too, am aware of this fact. We are both aware of the fact that you are conscious. But, according to the inner sense model of introspection now being considered, you have a different way of knowing this fact than I do. Your fact-awareness (of the fact that you are aware of things) is reached by a different method than my awareness of this same fact. Your awareness of this fact is reached by some form of inner sense, by awareness of internal (to you) objects. If introspection is meant to be an answer to our question, if it is supposed to tell us not only that you know you are conscious but how you (but not I) know it, then it must, in this way, embody a claim about the special objects you are, but I am not, aware of. If our awareness of the fact that you are conscious is not reached, in this way, by a difference in the objects we are aware of, then introspection does not represent an answer to our question. It doesn't tell us how you (but not I) know this fact. It is merely a way of repeating, under the guise of a fancy label ("introspection" or "inner sense"), that you know it.

I do not know about others, but I did not become aware of the fact that I have conscious experiences by an

awareness of the conscious experiences themselves in the way I become aware of the fact that there is beer in the fridge by seeing the beer. I have experiences of beer bottles but not experiences of beer bottle experiences.[12] I think those who suppose they are introspectively aware of their own experiences are simply confusing a fact they are aware of--the fact, namely, that they have experiences--with objects they are not aware of--the experiences the have. I can be made aware (of the fact) that I am stepping on an ant by actually seeing myself step on an ant (an event) but that is not the way I become aware that I see an ant. I don't see myself see an ant. The only sense in which I am aware of myself seeing an ant is in the sense of being aware that I see an ant, but this, the awareness o the fact that I see an ant, is not my way of finding out I see an ant. It is a restatement (using the words "aware tha . . ") of the fact that I know I see an ant. If one fails to distinguish, in this way, the facts we are aware of from the objects (events) we are aware of, one will mistakenly suppose that our undisputed (by me) awareness that we experience things is an answer to a question about how we know we experience them. One will suppose, that is, that the way we become aware that we experience things is by an introspective awareness of our experience of things. This, though, is double dipping under the cloak of an equivocation: citing an awareness that p as one's wa of becoming aware that p.[13]

Bill Lycan, an articulate and devoted exponent of an inner sense model of introspection, realizes that knowledge of internal facts (that, unlike zombies, we are conscious) is quite unlike ordinary sense perception. In seeing (becoming visually aware of) beer bottles, one becomes aware of some of their revealing properties. It is our awareness of these revealing properties that "tells us" they are beer bottles. That is how we know they are bee bottles. But coming to know, by inner sense, that we have conscious experiences, Lycan tells us (1996: 29; 1997: 761), is not at all like that. Our inner sense does not reveal qualities of the objects (the experiences) being scanned. He tells us that these (first-order) experiences (of beer bottles) do not (like beer bottles) have "ecologically significant features" and so our introspective "scanning" of them does not represent them as having properties. The knowledge (if any) we come to have by scanning first-order conscious experiences, the internal states that distinguish us from zombies, then, is acquired without a representation of the objects--the experiences-- themselves we come to know about. The experiences themselves are, so to speak, *invisible* to the introspective scanner. We come to have knowledge of them (that we have them) without ever being made aware of them. At least we are not made aware of them, as we are of beer bottles, as objects having properties that serve to identify them.

This sounds right to me. It is Lycan's way of acknowledging that inner sense, if it makes us aware of facts about ourselves (e.g., that we have conscious experiences), does so without ever making us aware of the conscious experiences themselves. But if this is right, it is also, I hasten to point out, an admission that introspection, as so understood, is not an answer to our question about how we know we have conscious experiences[14] It tells us, at best, that we know we are conscious, and it provides a label ("inner sense") for how we know it, but it doesn't go beyond the label and provide, as perception (of external objects) provides, propertied objects of awareness that explain how we know it. Unlike the perception of external objects and their properties (our awareness of which reveal to us the facts we come to know about them), inner sense gives us no objects and, if we follow Lycan, no properties of these objects our awareness of which explains our knowledge (awareness) of facts about them. Unless an inner sense model of introspection specifies an object of awareness whose properties (like the properties of beer bottles) indicate the facts we come to know about, an inner sense model of introspection does not tell us how we know we have conscious experiences. It merely tells us that, somehow, we know it. This is not in dispute.

We are left, then, with our original question: How do you know you are not a zombie? Not everyone who is conscious knows they are. Not everyone who is not a zombie, knows they are not. Infants don't. Animals don't. You do. Where did you learn this? To insist that we know it despite there being no identifiable *way* we know it is not very helpful. We can't do epistemology by stamping our feet. [15] Skeptical suspicions are, I think, rightly aroused by this result. Maybe our conviction that we know, in a direct and authoritative way, that we are conscious is simply a confusion of what we are aware of with our awareness of it (see Dretske forthcoming).

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ENDNOTES

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[1] For purposes of this paper I take zombies to be human-like creatures who are not conscious and, therefore, not conscious of anything--neither objects (cars, trees, people), properties (colors, shapes, orientations), events (an object falling off the table, a sunrise), or facts (that the cup fell from the table, that the sun is rising).

If there are readers who doubt that such creatures are possible (and it is for *this* reason they know they are not zombies), I confess to not really caring whether zombies are possible or not. Talk of zombies is merely a stylistic tool for posing an epistemological question: how do we know we are conscious? If someone believes that zombies of the kind I describe are not possible, I'm interested in how they

know this. I'm also interested in whether they think this is how they know they are conscious. I doubt it.

[2] Bermúdez (1998) makes a powerful case for the claim that both the self-specifying information (in perception of external objects) and the information supplied by somatic proprioception are primitive, non-conceptual, forms of self-consciousness. He acknowledges, though, that these forms of "self-consciousness are ways of perceiving the body (the "embodied self"), not ways of perceiving the psychological aspects (e.g., the consciousness) of the self so embodied (229).

[3]Thanks to Georges Dicker for suggesting this possibility. He is not responsible for the way I have formulated it.

[4] Siewert (1998, pp. 19-20, 39, 172) suggests that our awareness of things (or failure to be aware of things) is what gives one first-person warrant for believing we are (or aren't) aware of things. Chalmers 1996, pp. 196-97) agrees. Neither Siewert nor Chalmers tells us *how* a conscious experience makes one conscious that one is conscious. Chalmers says that there is something "intrinsically" epistemic about a conscious experience (196). Maybe there is (though I've heard the same said about moral qualities) but our question is a question about how such experiences make one aware that one is having them. In having the experience, there need be nothing one is aware of that depends on one's having the experience. So what is it that tells one that one has an experience? Levine (2001) says (p. 136) that the way he knows he has conscious experiences is by having them, but admits a few lines later that this doesn't answer questions about mechanisms (". . . just how this [knowledge that one is conscious] is accomplished, just what the epistemic mechanisms are, I haven't the faintest idea.")

[5] Those who are not direct realists about perception, and thus do not share the assumption I made in §1, will find hallucinations, dreams, and after-images particularly relevant since, for them, veridical perception of physical objects always involves awareness of the kind of mental intermediary of which (according to some) we are aware in hallucination. Among its other targets, then, this section is meant to address the argument of those who are not direct realists, those who think that in perception we are always aware (directly) of mental particulars, items that do not occur in zombies.

[6] I am not here endorsing a higher-order theory of consciousness. The question here is not what makes a mental state (e.g., a feeling of thirst) conscious, but if (as higher-order theorists maintain) its being conscious consists in one's being conscious of it, how one knows that the feeling is conscious (i.e., that one is conscious of it).

[7] Reid (1785: 20): "When I am pained, I cannot say that the pain I feel is one thing, and that my feeling it is another thing. They are one and the same thing, and cannot be disjoined, even in imagination." (taken from Stubenberg (1998: footnote 144). Shoemaker (1986: 20): "Feeling pain and being in pain are, to repeat, the same thing; and the introspective knowledge that I am in pain is at the same time the introspective knowledge that I feel pain."

[8] Hereafter, in speaking of *objects* of awareness, I mean to include (as objects) events, conditions, situations, processes, activities, and states of affairs. An object, as I here use the term, is any spatio-temporal particular--e.g., a sunset, a movement, a discharge, two objects standing in a certain relation to each other, a heat wave, etc. Universal properties (colors, shapes, etc.) and facts (that so-and-so has such-and-such property) are not objects.

[9] They would vanish in the same sense that husbands and wives would vanish if marital relations were banished. The men and women would still be there, of course; they just wouldn't be husbands and wives.

[10] Although I speak indifferently (for the moment) of an awareness of x and an experience of x, there is an important (for our purposes) difference. S's awareness of x is a relationship between S and x. It includes both S and x. It is, therefore, not wholly internal to S. So we wouldn't expect S to be aware of his own awareness of x merely by inspecting internal affairs (i.e., by *intro*spection) since the targeted object of awareness--S's awareness of x--is, in part, external to S. S can't know he is aware of x unless he knows there is an x to be aware of. S's experience of x, on the other hand, is wholly internal. An experience of x is not a relationship at all, although it is described in relational terms. If there is no x, we cannot describe this internal experience as an experience of x, but the experience may, nonetheless, be the same (in all its non-relational aspects) as an experience of x. If there is no x, then we would have to describe the experience as, perhaps, an experience *as of* x (perhaps an hallucination or dream of x). So S's experience of x (unlike S's awareness of x), is something S might become aware of by inspecting internal objects. The experience of x, therefore, is an eligible object for introspective awareness.

[11] There may be cases where we become aware of some fact--that, for example, there is movement on the right or that it is getting cold out--without being made aware of any object in the ordinary sense. Peripheral vision may make us aware of a movement on the far right without making us aware of the kind of properties (shape, color, size, orientation, etc.) usually associated with the perception of some object. Knowing that it is getting cold out by "feeling the cold" may be a way of becoming aware of some fact (that it is getting cold out) by an awareness not of some object (the air? one's own body?) but, simply the condition--the drop in temperature--one comes to know about. One feels the cold. That is how one knows it is getting cold. As indicated in footnote #8 I mean to include the perception of events (a drop in temperature, a movement on the right), conditions, states, etc. as instances of object perception. They are (unlike facts) spatio-temporal particulars.

[12]Sydney Shoemaker (1994, 1996--especially Chapters 10-12, "The Royce Lectures") gives what I regard as a definitive critique of perceptual models of self-knowledge. I recommend his essays to anyone who finds my own treatment too skimpy. I can't improve on Shoemaker.

[13] For more on the distinctions between awareness of objects, awareness of properties, and awareness of facts and their conceptual (not causal) independence, see (Dretske 1999).

[14] In fairness, Lycan doesn't offer his inner sense theory as a theory about how we know we have conscious experiences. It is, instead, a metaphysical theory about what makes the experiences conscious.

[15] At a reading of an early draft of this paper at a conference in Bielefeld, Germany it was suggested to me by Thomas Hofweber, Thomas Grundman, and Frank Hoffman that a reliability theory of knowledge provides a fairly straightforward answer to how we know we are not zombies. If we assume that zombies do not have beliefs, our belief that we are not a zombie is a reliable indication that we are not a zombie. We would not--indeed, could not--have this belief unless it was true. So the belief that one is not a zombie qualifies as knowledge that one is not a zombie. Everyone who believes they are not a zombie knows it.

As a reliability theorist, I am convinced this is the right place to look for answers, but I'm not convinced the answer is this simple. In the first place it works only for belief. It won't work if we imagine (as many do) zombies as creatures who are devoid of qualia-laden experiences (pains, tickles, visual experiences, thirst, etc.) but who may or may not have beliefs. The belief that one has conscious experiences, unlike the belief that one has beliefs, is not self-verifying. I am, furthermore, skeptical of reliability theories that identify knowledge with reliably produced belief. Unless one has grounds for one's belief, grounds that reliably indicate (carry information about) the conditions one believes to exist (perceptual experience constitutes such grounds in the case of perceptual knowledge-- see Dretske 1981), beliefs, even if reliable, do not qualify as knowledge. I do not, for instance, think one gets (for free, as it were) knowledge of P where P is a physical condition necessary for life--and, therefore, necessary for belief and, in particular, the belief that P. Such beliefs can't be false but they aren't, not for *that* reason, knowledge. Something more is needed.