Abstract: In this paper, I attempt to turn explanatory gap arguments against materialism on their heads by defending the idea that I am a zombie (in the boringly benign philosophical sense – sorry, no flesh-eating). Though it might seem that zombie-lovers like Chalmers ought to embrace me, I’m afraid I’d actually scare the bejeezus out of them. For where there is one zombie, there are bound to be more – many more. And while I have no designs upon your brain, I am as hell-bent as any big-screen zombie on infecting your mind with the idea that you too are a zombie yourself. Perhaps the greatest resistance to the idea that I’m truly what I claim to be comes from the fact that I talk with such facility about what it’s like to have certain experiences. My strategy here will be to explain how zombies can learn to talk about the so-called qualitative dimension of our experiences in a way that respects philosophical intuition, and which allows them to pass as “normal.” If my account of how I came to talk about “what it’s like” sounds plausible, or (better yet) familiar, then perhaps I will have succeeded in my mission of converting you to the unholy ranks of living dead.
Knowing What It's Like: A Zombie’s Perspective
(Presentation for the 2005 Mountain-Plains Philosophy Conference, Durango, CO)

Some philosophers profess to love zombies. They seem to think that the bare conceivability of zombies shows that materialism is bound to leave out the phenomenal dimension of consciousness (the “what it’s like” to have our conscious experiences). Others hate them; a typical materialist response to zombie-arguments is to deny their very conceivability. I think that’s the wrong strategy. The correct materialist response is to warn that zombies are everywhere, one of which you have the misfortune of listening to today.

Of course, I’m not a rotting corpse with a ghoulish taste for human flesh. I’m a zombie in the rather esoteric, though boringly benign, philosophical sense. I’m merely denying that my conscious “experience” possesses any of the immaterial phenomenal properties that those in the consciousness industry call “qualia,” qualities neo-dualists claim we refer to when we talk about “what it’s like” to have our experiences.1 Although I lack any pure phenomenal concepts, I nevertheless talk about the qualitative dimensions of consciousness much as any believer in such phenomenal properties would. For instance, I would agree that the so-called “hard problem” of consciousness arises because statements involving the qualitative character of experience bear no evident logical connections to descriptions couched in physical, physiological, functional, or even intentional terms. And I also agree that to the extent that such discourse is dismissed as unintelligible, one fails to have a satisfying theory of phenomenal consciousness. So I find myself endorsing many of the same intuitions that qualia-philes invoke “qualia” to

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1 Zombies are often characterized as just like regular human beings in all material respects, except that they lack any consciousness. Of course, this formulation threatens to beg the question against any materialistic understanding of consciousness, since it presupposes that ordinary human consciousness must be something in addition to the material. It would be better to characterize zombies as like ordinary human beings, except that they lack consciousness as neo-dualists understand it. It then becomes clear to me I am most likely just such a creature.
explain – without making any commitment to the existence of such physically mysterious phenomenal properties.²

Though it might seem that zombie-lovers like David Chalmers would embrace an actual zombie, I’m afraid my presence would give them cold comfort. For where there is one, there are bound to be more – many more. And while I have no designs upon your brain, I am as hell-bent as any big-screen zombie on infecting your mind with the idea (or would it be better to say “meme”?) that you too are a zombie yourself.

Perhaps the greatest resistance to the idea that I’m truly what I claim to be comes from the fact that I talk with such facility about what it’s like to have certain experiences. My strategy here will be to explain how zombies can learn to talk about the so-called qualitative dimension of our experiences in a way that respects philosophical intuition, and which allows them to pass as “normal.” If my account of how I came to talk about “what it’s like” sounds plausible, or (better yet) familiar, then perhaps I will have succeeded in my mission of converting you to the unholy ranks of living dead.

How it “looks” and “What it’s Like”:

Let’s begin with how I’ve come to talk about my experiences, or how things look or appear to me. My overall strategy (a common one among us zombies) has been to work from the outside in, rather than the inside out. My ideas of inner experience derive from my concepts of the external properties they are impressions of. Like everyone else, I’ve had to learn from others how to apply observation vocabulary in experience. In learning how to make observation reports that accord with the specific classificatory dispositions of our con-linguistics. I’ve faced the task of coordinating or calibrating states of myself with the application of observation concepts in experience. Simply put, I’ve had to learn to report the presence of a certain property (e.g., red) whenever I’m struck in certain

² Like any self-respecting zombie, I am what David Chalmers would call a Type-B materialist. I subscribe to an explanatory and epistemological gap between the physical and the phenomenal, yet I deny that it needs to escalate into an ontological one.
fashions – that is, whenever I’m in a certain internal discriminatory state. And I’ve further learned when to restrain my acquired dispositions to report such a presence when circumstances are such that my being in a particular discriminatory state is not a reliable indicator of something’s actually exhibiting that property. In those circumstances, I’ve learned to report that it only “looks” or “seems” as if that property is present, meaning that I’m being stimulated in a way that, under normal circumstances, would reliably indicate that property’s presence.

For me at least, these internal discriminatory states are presumably physiological states (and states of my nervous system in particular). But of course I’m not able to identify them in such rarefied terms. Ordinary observation vocabulary – including ‘looks’-talk – is conceptually prior to a developed neuroscience. In speaking about the task facing all speakers as they learn to apply observation concepts in experience, we should remain theoretically non-committal regarding the underlying physiological substrate. My concept of a sense impression is my way of referring to these underlying discriminatory states in a theoretically neutral way. As I use the term, a sense impression of some particular perceptible property is the imprint that is characteristically left upon one by the presence of that property under normal circumstances, which can then be used by that subject to elicit observation reports of its presence. So the task described above is that of my learning how to coordinate sense impressions with the application of appropriate observation concepts. And when I say that something merely “looks red” to me, I’m reporting being in a discriminatory state that I’ve “recruited” (to borrow a term of Dretske’s) to indicate to me the presence of red things in my environment; that is, I’m reporting my red sense impression.

A few things should stand out about my notion of a sense impression. First, we have a readily explicable authority over sense impressions that we don’t have with respect to

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3 This would seem to mark a significant distinction between concept-mongering beings such as myself and mere discriminatory systems such as thermometers.
4 This notion sense impression closely resembles that of Wilfrid Sellars (one of the great zombies of our time?). See *Empiricism and the Philosophy of Mind* (Part XVI). Sellars initially introduced the notion of a sense impression to distinguish sensations from thoughts. The sense impression is the non-conceptual “descriptive residue” that distinguishes a perceiving that something is the case from a mere thinking that it is the case.
external features of the world. To report the presence of a red sense impression, one needs merely to detect when they are disposed to report when something is or looks red to them. No gap opens up between having a sense impression of some property and having, if you will, an impression of that impression, for the discriminatory state that I am in when I have a red sense impression is precisely that - a red sense impression. Since the conditions in which one is disposed to report the presence of a red sense impression are precisely those in which something is or looks red to that subject, it pleasantly follows that reports about sense impressions are, what you might say, “phenomenally transparent.” So it should be evident that while I characterize my sense impressions in terms of the observable properties of external things, I do not need to imbue them with any mysterious, non-material phenomenal analogues to external properties. I don’t need to “paint” my red sense impressions with phenomenally red paint. In short, sense impressions do not have to possess the qualities that they are impressions of.5

Second, since sense impressions are understood as internal discriminatory states that dispose subjects to make certain observation reports, they are not identified in physical or physiological terms, but rather in terms of their causal roles. As such, different sense impressions of the same perceptual quality might have vastly different intrinsic constitutions or realizations. A sense impression of red for a typical human might be realized in a wholly different manner in a bug-eyed alien … or a bat (if indeed, bats have such impressions at all). Sense impressions do not have to be similar even between

5 Nevertheless, sense impressions stand (or are supposed to stand) in containment and exclusion relationships to one another in much the same way that the features that they are impressions of stand in relation to one another. This thought is all I need to capture the truth behind the idea that sense impressions are (or at least should be) images of the external world. Just as an instance of some determinate shade of red, such as scarlet or crimson, is at the same time an instance of the determinable red, the particular internal state that realizes (or plays the role of) a sense impression of scarlet at the same time realizes a sense impression of red. That is, the class of red sense impressions includes that of scarlet sense impressions. Similarly, red and green sense impressions are supposed to exclude one another just like properties of redness and greenness presumably exclude one another in the external world. By the way, it will be obvious here (and throughout) that I appeal to a naïve realism about colors (and other perceptual properties), according to which such properties are primarily attributed to (or possessed by) everyday objects in the external world, and not sensations. I’m afraid that this paper is not the place to defend such a quotidian position.
members of the same species. The precise manner in which different sense impressions are realized in creatures like us is a matter of empirical investigation and discovery. Though it might seem a bit weird, there is nothing in the bare notion of a sense impression that would prohibit non-material realizations of sense impressions. Perhaps that’s what non-zombies profess to have. The notion of a sense impression is thus neutral between materialism and dualism.

Armed with my notion of sense impression, I can talk about “what it’s like” to have certain experiences in a fairly intuitive fashion. For me, the expression “what it’s like” picks out the particular manner in which a subject realizes its sense impressions. Such a proposal makes good sense of inter- and intra-personal comparisons of the qualitative dimension of experience. Due to differences in our perceptual constitutions and available discriminatory states, “what it’s like” for me to see red might be completely different from “what it’s like” for a bat or bug-eyed alien to see red, so much so that we could not understand what it would be like to be either. And while what it’s like for me to see red is presumably pretty much what it’s like for most everyone else, it might differ slightly for non-standard folk (e.g., synaesthetes, or those outfitted with those spectrum-inverting lenses of philosophical legend). One especially appealing aspect of my way of speaking is that I can subscribe to certain internalist intuitions, while at the same remain a thorough-going externalist about intentional content. On my parlance, internally indistinguishable subjects (those “molecule-by-molecule” duplicates of philosophical fantasy) will have experiences with similar phenomenal characters, even though external considerations dictate that the representational contents of their experiences are radically different.

6 To take a striking example, persons with synaesthesia appear to have recruited sense impressions governing their application of various observational concepts, which are less discriminatory than normal folk, and which are subject to an unusual range of non-standard conditions. Conditions in which they are inclined to say something “looks red” to them (such as the presence of particular numbers or letters) can be quite different, and more extensive, than the conditions in which I’m apt to say something looks red to me. Furthermore, since my perceptual apparatus might change over time, even though I might not realize it, what it’s like for me to see red now might well not be what it’s like for me to see red in the future or the past. Indeed, it’s possible (albeit highly improbable) for what it’s like for me to see red eventually to shift all the way across the spectrum and become what it’s like for me to see green.
One can see that the functional unspecificity of sense impressions allows me to suspect that what it’s like to have a particular kind of experience could have been other than what it actually is. And my way of talking nicely affords two distinct ways to cash out this possibility. On the one hand, ‘what it’s like’ can be taken to refer rigidly to the indicated sense content, allowing the internal discriminatory state to vary across possible situations. Read in this fashion, the thought that what it’s like to have a certain sort of experience could have been otherwise means that it is conceivable for me to have recruited some other internal discriminatory state to indicate that sense content. Alternately, ‘what it’s like’ can be taken to rigidly pick out the internal discriminatory state, allowing the indicated sense content to vary. On this interpretation, the thought above asserts that I could have recruited that internal discriminatory state to indicate an entirely different sense content. Taken together, these separate thoughts generate the idea that ‘what it’s like’ is determined neither by a subject’s physiology nor by the contents of its intentional states. But now we can see that the intuitions so suggestive of an explanatory gap actually trade on different ways in which one can pick out the referent of ‘what it’s like.’ In short, the explanatory gap is a product of a readily explicable referential ambiguity.

**Knowing What It’s Like**

I think my way of speaking also helps to untangle the issues surrounding the so-called “knowledge argument,” for it’s clear Mary (the color benighted cognitive scientist in Frank Jackson’s oft-discussed thought experiment) has not come to face the task that the language of sense-impressions has been introduced to describe – namely that of

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8 These, of course, are the very intuitions which allow so-called “modal arguments” for the explanatory gap to get off the ground. See Chalmers, 1996; Levine, 1983.

9 This type of referential ambiguity (which outside the philosophy of language, appears to generate little trouble, and even less excitement) is characteristic of definite descriptions in modal contexts. For instance, the statement, “My wife could have been in pictures.” similarly admits of two distinct readings. It could either be about Monica (my actual, current wife) in particular, or it might be understood as making a claim about the range of my erstwhile marital prospects. In some of his more technical arguments against the Type B materialist’s strategy of positing a posteriori identities between the material and the phenomenal, David Chalmers claims that purely phenomenal concepts must refer to the same phenomenal items across all possible worlds; there isn’t any distinction between their primary and secondary intensions. As you can see, I disagree; I’d claim that so-called “phenomenal concepts” (those formed by the “what it’s like” operator) act more like definite descriptions than names.
coordinating her own internal states with the application of particular observation concepts in experience.\textsuperscript{10} The knowledge argument gains its force, because it’s unclear how Mary’s assumed vast knowledge of physiological facts ever could help to overcome this task. Doing brain science by itself will not tell Mary when to report the internal occurrence of a red sense-impression.

When she escapes her black and white environment and enjoys her first red experience, Mary is assumed to acquire knowledge of what it’s like to see red. Anti-materialists typically suppose that at this point, she has acquired a new phenomenal concept with which she can entertain new thoughts with purely phenomenal contents. As a zombie, I’m of course inclined to disagree, for I’m bound to claim such knowledge as well, and I certainly couldn’t have acquired any purely phenomenal concepts (certainly not through acquaintance with anything like qualia!). Accordingly, I propose that attributions of knowledge of what it’s like to have a certain kind of experience should be understood, not in terms of qualia, but rather as claims that a subject has a justified ability to apply corresponding observation concepts in experience.

While most speakers would qualify as capable enforcers of the norms governing color reports, it would be irresponsible to extend this authority to just anyone. A color-blind person would obviously be an incompetent teacher of color terms, even if he knows a great deal about the human visual system, as well as the inferential connections between colors and other empirical concepts. Mary has the potential to make accurate color

\textsuperscript{10} See Jackson (1982). The knowledge argument continues to be one of the most vivid illustrations of the hard problem of consciousness. For the uninitiated, here’s a little bit of background: Jackson’s initial aim was to draw out an intuition that there is some sort of epistemic gap between phenomenal and non-phenomenal facts. To do so, he invited us to consider the celebrated case of Mary, a neuroscientist who is supposed to know everything there is to know about the mechanics of the human visual system, but for some fantastic reason (typically imprisonment in a wholly black-and-white environment), she has never had a red sense impression. Most are inclined to agree that despite her vast knowledge of neuromechanics, Mary nevertheless lacks “knowledge of what it’s like” to see red. So the thought experiment suggests that phenomenal knowledge cannot be reduced to, or derived from, theoretical knowledge of physical, physiological, or even functional and representational facts. Originally, Jackson went on to elevate this epistemic gap into a metaphysical one. That is, he took the thought experiment to support the thesis that phenomenal facts are ontologically distinct from the mundanely physical, physiological or functional. Although fanciful and woefully underdescribed, it seems hard to resist the intuition that Mary learns something when she escapes her black and white environment. The challenge for materialistically inclined philosophers of mind is to explain (or explain away) her post-release enhanced epistemic standing without invoking mysterious, non-material “phenomenal” facts.
discriminations, and she knows the inferential connections color terms bear to the other terms in our language. But until she *justifiably demonstrates* that she can apply color concepts in experience as reliably as competent speakers, we can reasonably deny that she truly *knows* what it’s like to have perceptual experiences of color.\(^{11}\) She lacks a *justificatory status*, which manifests itself in our reasonable reluctance to grant her authority enforcing the norms governing our observational vocabulary. And this would be so, even if she happens to possess an uncanny innate *ability* to make accurate color discriminations. More than a mere ability to make accurate color discriminations, knowing what it’s like requires one to have grounds to *justify* this discriminative capacity as well.\(^{12}\)

Notice crucially that I haven’t claimed that Mary is unable to entertain any specific *beliefs*. Even before her release, she might *suspect* that something looks red to her yet fail to *know* this, for she fails to have the appropriate experience to justify this suspicion. In fact, if she uses the “what it’s like” operator as I do, then with her assumed knowledge of comparative brain anatomies she can justifiably believe that what it’s like for her to see red would pretty much be what it’s like for most other humans to see red. Rather than missing the conceptual repertoire to form certain beliefs, she lacks the history or experience required for her to entertain those beliefs *responsibly*. And it is her assumed

\(^{11}\) Observe that simply having an experience need not be sufficient for *knowing* what it would be like to have that kind of experience. One can see this most clearly in the case of the perceptually subtle qualities attributed, for instance to wine, beer, or chocolate. Utterly lacking a connoisseur’s palate, a single passing acquaintance with an expensive wine will most likely not be enough for me to claim that I truly *know* what it’s like to experience its finer characteristics.

\(^{12}\) For this reason, we need to distinguish this analysis of knowing what it’s like from the various versions of the “ability hypothesis” advanced by Lewis (1990). Perhaps the most popular type of response to the knowledge argument, Lewis suggested that the knowledge Mary gains is not factual knowledge at all (or *knowledge* that, but rather some sort of ability (or *knowledge how*). Originally, Lewis proposed that upon having her first red visual impressions, Mary gains new imaginative capacities – e.g., the ability to conjure up a red impression in memory. More sophisticated versions of this strategy hold that Mary gains recognitional capacities or something like the ability to access physical facts in a new “quasi-indexical” fashion (see Loar, 1990, Carruthers, 2000, Perry, 2001, and Papineau, 2002). Without going into great detail, the trouble with these proposals is that it is hard to pinpoint exactly what the ability or abilities in question are, for it seems that one can pry them apart from the knowledge Mary gains upon her first red sense impression. For instance, one could reasonably suppose that Mary learns what it’s like to see red, even if she couldn’t later come to envisage it in imagination.
epistemic responsibility, not simply her lack of experience, which really prevents her from ever having entertained beliefs that things look red to her.13

Insofar as their perceptual apparatus differs from our own, we’d also be justifiably reluctant to grant perceptually exotic creatures – bats, bots, or bug-eyed aliens, for instance – the authority to govern the use of our color terms. In particular, their different physiology might well prevent such beasts from being able to tell when things are likely only to “look red” to a human observer. Their different perceptual equipment might prevent them from anticipating our justifiable perceptual errors. Hence we can respect the intuition that we are unable to know what it’s like to be a bat, without having to claim we can’t so much as entertain the same beliefs or that there is some sort of special phenomenal content wholly unavailable to us. Some perceptually exotic creatures might even make the same color discriminations that we do (in their own terms, of course). Still, if we lack sufficient contact with these creatures to justifiably believe this extensional equivalency, we can reasonably deny them the authority to enforce the rules governing the use of our color concepts. So while they would know what it’s like for them to see red, they might not know what it’s like for us to see red.

This last point shows how we should deal with an objection one might raise to the idea that knowing what it’s like amounts to a justified ability to apply a specific concept in experience. The objection has us suppose that Mary comes to have her first red sense impression without realizing that it’s a red sense impression that she’s having (say, by viewing one of several unlabeled paint chips). So while it’s clear she still lacks the

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13 Consider how this proposal applies to those ever-popular subjects of philosophical fantasy: our physical and functional duplicates spontaneously generated out of swampmuck. Such abominations might make all sorts of claims about how things look to them, and they might try to convince us that they have the requisite experience and know-how to enforce the norms governing our observation vocabulary. But the justifications they give for entitlement to this authority would fail, simply on the grounds that they would be false. So even though, by some remarkable coincidence, some such beings happen to have the discriminatory capacity and classificatory dispositions to be competent reporters, it still would be inappropriate for us to so treat them. For if it truly were a cosmic coincidence that they have this gift, then we would be in no position to responsibly believe this to be the case. Moreover, if you’re of a frame of mind to believe that such beings don’t genuinely apply any observation concepts at all, on the grounds that they lack the requisite history to be true participants in a linguistic community, then you might conclude that there is nothing it is like for them to see red. For in that case the expression ‘what it’s like for them to see red fails to determine any referent. For a time at least, they’d be “zombies” (though not the kind I am), even though they’d try to convince us otherwise.
justified ability to apply the concept red, she nevertheless knows in some sense what it’s like to see red. It might seem, then, that my proposed analysis of knowing what it’s like fails to fully account for our intuitions about the Mary case.

But this objection ignores the perspectival nature of knowledge attributions generally. While I grant that Mary has failed to demonstrate mastery over our concept of red, presumably she can still classify future visual experiences as being of roughly the same type as she has when she views the red chip. Thus we might still claim that she has acquired a justified ability to apply an observation concept which she could demonstratively identify as “the shade of that chip,” and which turns out to be more or less extensionally equivalent to our concept of red. And so, in a *de re* sense (or from our perspective), we might say *of the property red*, that Mary has learned what it’s like to see it. But in a *de dicto* sense (or from her perspective), we can reasonably deny that she knows what it’s like to see red. Not until Mary comes to realize that her experience is one that we would classify as a seeing of red, would she characterize herself as knowing what it’s like to see red. Once we register that attributions of knowledge of what it’s like admit to the same *de dicto/de re* distinctions as attributions of knowledge more generally, we can see that the objection fails to provide a true counterexample to the proposed analysis. Indeed, I take this consistency with other types of knowledge attributions to be a great virtue of my proposal.

**Wrap-up**

As I’ve shown, I can use my materialistic notion of sense impression to make sense of many of the curious things philosophers have said about the qualitative character of conscious experience. Zombies like me have to learn how to talk like everyone else, but they have to do it without the benefit of “consciousness,” as qualia-lovers understand it. In this paper, I’ve shown how zombies have learned to pass as “normal.” But this of course raises the question as to whether there might be any non-zombies around (left?). If you think that immaterial qualia attends your conscious experience, then so be it. I
haven’t taken it upon myself to show that the very notion of qualia is unimaginably preposterous or otherwise self-refuting; nor do I deny the logical conceivability of non-zombies.\textsuperscript{14} If on some other grounds, however – the causal closure of the physical, perhaps, or the peculiarly private nature of qualia – you find the notion of qualia unattractive, then I’ve provided you with a recipe for avoiding it. You, too can embrace your own inner zombie, and do so in perfectly good conscience.

\textsuperscript{14} Recall that the bare notion of a sense impression doesn’t logically preclude their immaterial realization.