

# What Would It “Be Like” to Solve the “Hard Problem”

## Cognition, Consciousness, and Qualia-Zombies

Greg P. Hodes\*

### Abstract

David Chalmers argues that consciousness - authentic, first-person, *conscious* consciousness - cannot be reduced to brain events or to any physical event, and that efforts to find a workable mind-body identity theory are, therefore, doomed in principle. But for Chalmers and non-reductionist in general consciousness consists exclusively, or at least paradigmatically, of phenomenal or qualia-consciousness. This results in a seriously inadequate understanding both of consciousness and of the “hard problem.” I describe other, higher-order cognitional events which must be conscious if the “hard problem” is to be solved -- in any sense of ‘solve’ which would make us any the wiser about it -- but whose consciousness is quite different from the qualia and phenomena usually inventoried. Events of this kind are both part of the hard problem and the means by which we will solve it, if we ever do.

**Key Words:** consciousness, hard problem, cognition, Chalmers, Lonergan

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### I. Introduction

Cognitive philosophers and scientists who do not categorically reject first person consciousness typically identify it with phenomenal awareness or awareness of qualia, and those few willing to attribute first person consciousness to higher-level cognition nearly always restrict it to these kinds of consciousness. In this paper I call attention to the fact that if we are to solve the “hard problem” - or any other problem - in any sense of ‘solve’ that would make us any the wiser about it, there must be conscious higher-level cognitional acts and contents whose consciousness is quite different from the sorts of qualia usually inventoried. These conscious, higher-level cognitive acts are both *constitutive* of the solution

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\*Corresponding Author: Greg P. Hodes, Ph.D. E-mail: ghodes@juno.com

to the hard problem and part of what such a solution must explain and integrate with the relevant physical events.

Facing up to these facts may make the problem harder, but it is the price that must be paid if we wish to free ourselves from a grossly inadequate idea of what consciousness is and if we wish to understand what we are doing when we, as conscious subjects, attempt to solve the mind-body other problem or any other problem.

The paper is primarily addressed to those who acknowledge some form of first-person consciousness, but its principal argument is good *a fortiori* against those who do not acknowledge any such consciousness.

## II. Definitions and preliminary clarifications: ‘consciousness’ and ‘cognition’

Cognitive philosophers and scientists routinely use ‘cognition’ to refer to events that are non-conscious and describe events that are non-conscious as “consciousness.” This rather Pickwickian use of basic terms misleads those not forewarned and strikes some non-reductionists as tendentious. Of more substantive concern, blurring the distinction between the first-person and third-person senses of ‘consciousness’ muddles fundamental issues, and ignoring the distinction encourages the belief that there are no such issues. So it is important to be clear at the outset how I will be using ‘cognition’ and ‘consciousness’. When I wish to refer to a non-conscious “cognitive” event, I shall use the expression ‘non-conscious cognition’ or place ‘cognitive’ in cautionary quotes; thus ‘cognition’ *simpliciter* will be reserved for the first person conscious event of getting to know something, as in ordinary usage. Similarly, ‘consciousness’ without cautionary quotes will refer to first person, “what-it-is-like-to be” consciousness. Thus what follows will be a conscious examination of certain conscious acts of cognition and their conscious contents -- that is, it will be if my main thesis is correct<sup>2</sup>

### What counts as a quale?

Cognitive theorists offer somewhat different examples of what counts as a quale or the content of phenomenal consciousness, but the following list from Chalmers is typical. They are said to include: visual, auditory, tactile, olfactory [experiences]; taste, temperature, pain, other bodily sensations, mental imagery [including, linguistic imagery], emotions, a sense of self (a kind of background hum... that is somehow fundamental to consciousness and there when the other components are not), dreams, arousal and fatigue, intoxication, conscious thoughts that have a qualitative feel about them (the tug of memory... the whiff of leonine quality... when thinking of a lion) (Condensed from Chalmers 1996; pp. 6-10; here and throughout, material in square brackets is added).

Chalmers’ inclusion of “conscious thoughts” among these examples may mislead the unwary. For Chalmers, the consciousness of such thoughts consists entirely in their “qualitative feel,” – their qualia-likeness -- as his examples show. And the “qualitative feel” is minimal: The role of the phenomenal in belief, for example, is “quite thin ... the most substantial requirement for having a specific belief [intention] will lie elsewhere than in phenomena,” that is, it will be functional (Chalmers 1996, pp. 21-2, 177).

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<sup>2</sup>See Chalmers’ discussion of this terminological muddle. (Chalmers [a], Part I.)

Similarly, we are to think of judgments as “what is left of a belief after any associated phenomenal property is subtracted ... judgments can perhaps be understood as what I and my [non-conscious] zombie twin have in common” (Chalmers, 1996, p.174). And knowledge itself (along with self-consciousness awakens, introspection, attention, voluntary control, and reportability) is listed as an example of psychological “consciousness” (note that the cautionary quotes are Chalmers’s). He tells us that, although there are phenomenal states “in the vicinity of these “concepts ... in each case a functional concept seems to capture what is central” (Chalmers, 1996, pp.26-28). For Chalmers and cognitive theorist generally, a “functional concept,” like a “psychological” concept, is the content of a third-person account, i.e., it is an explanation in terms of non-conscious events.<sup>3</sup>

To take another example, Michael Tye holds that: ... the phenomenal aspects of understanding derive largely from linguistic (or verbal) images ... Depending on the content of the passage; we also undergo a variety of emotions and feelings. Once *all* these reactions are removed, together with images of an inner voice and the visual sensations produced by reading, some would say (myself included) that no phenomenology [sic] remains (Tye, p. 1).

Neither Tye nor Chalmers suggests that any other sort of consciousness plays a role here; so if Tye’s “phenomenology” is all our consciousness amounts to in the crucial act of understanding, there can hardly be anything more or different in the other higher-level cognitions.

There are a few dissenting voices. Galen Strawson, for example, holds that it is “like something” to have intentions, beliefs, and other higher-order cognitions and, therefore, that such acts themselves count as conscious. And he argues -- as I do -- that what it is like to engage in these epistemic acts is quite different from what it is like to see or hear or imagine linguistic shapes and sounds or to experience any of Chalmers’ or Tye’s qualia. One could experience all these sounds, images, pains and pleasures, affects, “sense of self” and even the “reaching out of our concepts” but understand nothing. And two individuals could experience quite different qualia but experience the same understanding. So understanding must be “like something” other than Chalmers’ qualia (Strawson, 1994).

I think Strawson is right as far as he goes, but I do not think he fully grasps implications of this insight.

### III. Why there has to be more to consciousness than qualia

It is very much to be hoped that the kinds of qualia and phenomena usually inventoried are not the only kinds of consciousness there are; for if they were, we could not know that there *is* a “hard problem” – to take the dramatic example – let alone solve it, in any sense of

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<sup>3</sup>There is serious confusion in some quarters about what Chalmers does and does not hold to be conscious. For example, a referee for *Axiomathes* cited this same passage as proof that Chalmers holds that all the listed acts are conscious (*really* conscious) and also cited Chalmers’ term ‘awareness’ as intended to include all kinds of first-person consciousness, among which were to be counted those listed! But, as Chalmers makes quite clear, he uses ‘awareness’ to signify precisely those “cognitional” events that are *not* conscious (see, e.g., Chalmers, 1996, especially pp. 105, 165, and 239, which are cited in the index under the subheading: “*Awareness*; distinctness from consciousness”). Chalmers acknowledges that his usage, which has been the target of much complaint in the literature, is counter-lexical.

‘know’ or ‘solve’ that would make us any the wiser about it. The reason we could not is that these sorts of “what-it’s-like-to-be-ness” are not those that characterize the acts of becoming puzzled, inquiring intelligently, formulating the problem, inventing an hypothesis, and evaluating it in the light of the evidence which, *for us as conscious subjects*, are *constitutive* of the hard problem and its solution. Unless each of these cognitional acts and states has its proper consciousness -- a consciousness quite different from its associated linguistic images, affective states, or a “sense of reaching out” -- our efforts must leave us quite uninformed. For all first person purposes, not to be properly consciousness of the essential components of one's theorizing is to have no theory.

Those who deny that the mental acts and contents listed in the previous paragraph are conscious in any way at all place themselves in the embarrassing position of not being conscious that that is their opinion -- or they would be in such a position if they could be conscious of what position they were in. Those who do countenance some form of consciousness can respond in one of two ways. (1) They may agree that the acts listed are conscious, but deny that their consciousness consists of anything other than qualia or phenomena like those usually inventoried. Or (2) they may concede that these acts are constituted, at least in part, by kinds of consciousness quite different from those usually listed and take a fresh look at the consciousness side of the hard problem.

I make the case for rejecting (1) in Part V after providing the necessary background in Parts III and IV. The point conceded in (2) is not that these cognitional acts are some very special kind of qualia or phenomena (whether they are or aren't I take to be largely a verbal issue), but that they are conscious -- that it is “like something” to have them, and that just what it is like to have each of them, and the point of its being “like” that, are central to the problem of consciousness.

#### **IV. What would “be like” to solve the “hard problem?”**

If we as conscious subjects succeed in understanding what consciousness is and how it is related to brains and the non-conscious world in general, we will certainly do so in the same way we succeed in understanding anything else: by being consciously intelligent and reasonable about our experiences (of course this is not to deny that there are also non-conscious events that are necessary for, and lawfully related to, these conscious events).

From a first-person perspective and in the most general terms, what will this require? The necessary motives and operations are well known and were listed briefly in Part II. To show why they must be properly conscious let us spell them out. To begin with, one must have had some experience with consciousness and with brains, among other things. The cognitive theorist who has never been conscious (the “zombie” cognitional theorist) or one who, though conscious, has never so much as seen a picture of a brain or read a word about brains is, obviously, not a player in the game we are now examining. But experiencing the data to be understood is not enough. Everyone has had experiences of bodies and of her own mind, but very few are seriously interested in how the two are related. The mind-body problem is a problem for research only if one is consciously puzzled about the relevant experiences. So if experiencing data were all there were to solving the hard problem, one would be unaware that there is any problem to solve and would have no clue as to whether she had solved it to her satisfaction or anyone else's, for there would be no normatively conscious intellectual curiosity to satisfy.

But the point of getting puzzled and asking questions is to work out the answer, and this requires inventing hypotheses. Since, at most, only one of these guesses can be correct, it will be necessary to check the logical coherence of each, test it against the available evidence, carry out experiments, and evaluate it in relation to the body of established knowledge. Failure to see the need for such verification is the absence of judgment; knowing when one has succeeded in proving or disproving a hypothesis is the successful exercise of judgment. And all these normative needs and operations must be conscious. For, to repeat, if they are not conscious, no one will seem even to herself to be any the wiser because of them, no matter what events have occurred non-consciously in her brain.

Such, I submit, is the correct account, however brief and jejune, of what must occur, from a first-person perspective, if and when we solve the hard problem or any other problem. The reader can confirm this by considering her own intellectual life; for the intellectual motives, acts, and contents described are the substance of that life and the common currency of her discourse with other scientists and philosophers. In any case, the outcome can hardly be in doubt. For to deny the necessity of having the requisite experiences is to deny that there is anything to inquire into, and to find nothing to be puzzled about or to be uninterested in a solution is to declare one's intellectual curiosity in abeyance. Similarly, to be unable to invent a plausible hypothesis is to exhibit one's lack of intelligence, and to accept the first hypothesis that comes to mind without any attempt at verification is to be intellectually irresponsible.

So if a proposed solution to any problem is to seem plausible even to the one proposing it, it must be the conscious result of consciously carrying out this functionally integrated set of conscious operations. Awareness that one has been successful, *prima facie*, in doing this is what ‘seems plausible’ means. To recommend one's theory to others on the grounds that in working it out one was un-acquainted with the data, or unintelligent, or unconcerned about evidence (“search me: my zombie did it, whatever it was”) would seem polemically ill-advised. For the same reason, any attempt to argue that the foregoing is not the correct first-person account of coming to know anything, including the solution to hard problem, would be self-refuting. For it would necessarily appeal to the conscious experience and intellectual motives it is impugning, and rely on just those conscious operations of perception, intelligence, and judgment it declares to be ineffective or which it claims to perform non-consciously.

### **Subjectivity and Objectivity**

So, if doing what I have described is what knowing is on the side of the conscious subject, then it will result in more or less justified true belief, and so will inform us more or less accurately about what is really the case about minds and brains.

Some cognitive theorists will be more than a little suspicious of this claim. It will be alleged that our desire to know, and perhaps even the operations it employs, are subjective and cannot provide objective guidance, and that; in any case, they may very well go wrong. But the illusion of “subjectivity” is easily dispelled by noting that the conscious need to understand things as they really are that is motivating the objection is a normative component of *very same desire to know* which one is impugning as subjective, and the experiential and intellectual operations and contents one is relying on to make the objection convincing are the *very same operations one is seeking to discredit*. If we, as conscious

subjects, ever do succeed in transcending subjectivity, we do so, at least in part, by means of just these conscious processes, operating on such data as we are consciously acquainted with, and motivated and guided by just this normative intellectual need.

It is the intrinsic normativity of one’s intellectually curiosity that urges him to use his wits and good judgment if he wishes to satisfy that curiosity and that stubbornly declines to be satisfied with fudging, however innocently gratifying to other needs that may be. Of course the process can go wrong: It is the business of better judgment to know when that has happened, and to remedy it by the more competent exercise of the same operations. (How else *could* we identify and correct an error?)

What I have been describing seems so obvious to me that I find spelling it out a little embarrassing. For many it will be “folk psychology;” nevertheless, for folks who wish to know anything at all, this “psychology” is indispensable.

There is a stronger claim to be made that is, perhaps, not quite so obvious. What is, or could in principle be, the cognitional outcome of successfully carrying out these conscious operations on the data of experience will serve as a quite general “operational” definition of what is really the case insofar as we, as conscious subjects, could know about it. Again, if the reader thinks that the conscious operations I have described (together with whatever non-conscious events are involved) are incapable of informing him of what is really the case about the world, about conscious knowing, and about the hard problem, let him ask himself by what operations he became consciously convinced that they really could not.

#### **“A-Consciousness” and “P-Consciousness”**

It will be helpful to contrast the theory of consciousness cognition I have been advocating with Ned Block’s theory of “access consciousness” (“a-consciousness”) and “phenomenal consciousness” (“p-consciousness”). “The paradigm cases of p-consciousness are sensations” [some of Chalmers’ and Tye’s qualia], whereas the paradigm a-consciousness states are “propositional attitudes, states like thoughts, beliefs, desires, states with representational [intentional] content expressed with a ‘that’ clause.” The crucial point is that whatever is a-conscious is “available for use in reasoning and rationally guiding speech and action” (Block, 1997, p. 381).

But for Block an item quite devoid of p-consciousness -- a “silicon zombie,” for example -- may be a-conscious. Again, there is no suggestion that in this case a-consciousness is conscious in some other way. Block seems to assume that all first-person, “being-like-something” consciousness must be phenomenal consciousness more or less like those listed by Chalmers and Tye, and that this sort of consciousness would constitute whatever consciousness the higher-level cognitional acts included under a-consciousness might have or be associated with. Thus, in the silicon zombie case, the “reasoning” and “rational guidance” would be and would remain non-conscious.

My point is quite different from Block’s and much simpler. The higher-order cognitional acts in question are conscious, not merely as Chalmers-Tye type qualia, but, as I show in Part V, in their proper natures. If any of the cognitional acts I have been describing are and remain without their proper consciousness, they are useless to us as conscious knowers. I think the p-consciousness-a-consciousness distinction gets at something real and important. My problem with it is that I do not see how these two sorts of “consciousness” could, either jointly or separately, explain how we consciously know about them or about anything else.

## V. The "hard problem" made harder

To show what we would be up against if the point I have been making is correct, I will describe four salient features of such conscious, higher-level cognition, three of which, at least, will be quite familiar.

### Radical Non-locality

It is true that our mental images seem quite different from the objects affirmed by science or the external objects of sensation, especially when the images are recollected or freely imagined. But they are also much more like such objects than the intellectual operations, states, and contents I have described. The mental image of a meter rod is "in" a kind of "mental" space, -- the mental image has a "left side" and a "right side" and is "a hundred times as long" as one's mental image of a centimeter. The mental "image" of how large a basketball feels as compared with a baseball exhibits the same puzzling "spatiality." But whatever kind of "space" "mental length" or "mental size" may be "in," and whatever may be its relation to physical space (one cannot have the actual meter rod or the basketball or the array of particles constituting them in one's head -- there isn't room!), it seems clear that certain kinds of conscious events and their contents are not in any kind of space at all.

Of course I am talking about abstract concepts, universals, and our ability to conceive them consciously. However intractable the ontological problems burdening these epistemic items may be, it is clearly senseless to ask how many inches (angstroms, meters, light years) long one's abstract concept of distance is or whether one's act of consciously conceiving it is bigger than a bread box. Nevertheless, we certainly do grasp and use abstract concepts -- the senses of general terms (Don't we?). And in doing so we are not merely experiencing word tokens or their concrete referents.

Again, however "non-localized" a certain feature of quantum mechanics may be, it is not as radically non-localized, or non-localized in the same way, as the concept of such a feature. For the concept, if it is accurate, is wholly true of every such item without being identical with any or all of them, as Plato observed; whereas an information field informs only its localized quantum events (there are quantum events occurring in the brain of someone thinking about quantum events, but his idea of a quantum event does not describe or refer only to those particular quantum events).

The same point can be made about temporal concepts. Just as scientific laws are conceived as applying to similar events in different particular places, so they are conceived as true, not just at this or that particular time, but at any time and place meeting certain general conditions. For *any* time interval chosen, a body near the surface of the earth accelerates *in vacuo* toward its center at approximately thirty-two feet/second/second, and General Relativity shows how the laws of nature can be invariant for all reference frames.

The ability to free its concepts from particular places, particular times, and particular reference frames is one of the things human consciousness can do.

### Normativity

At issue here are logical and epistemic norms, not, of course, social conventions. The idea that cognition is *constituted*, in part, by rational norms will be best known to many readers from Davidson's "holism of the mental." But Davidson uses rational holism to introduce an

explanatory dualism (no “strict” psychophysical laws) into his mind-brain identity theory. Because I am not now advocating any theory of the mind-brain relation, I offer another less theoretically encumbered illustration of the “genetic fallacy.”

Suppose cognitive science to have advanced to the point where one could determine when a subject is having a true belief of a certain kind by observing, by means of some suitable device, the electrochemical activity (or whatever) of his brain. We will suppose that only beliefs that have as their content analytic, *a priori* propositions (sentences, if one prefers) are being tested, so that determining the truth of the subject’s judgment will not depend on observing any external facts other than the instrument’s readings and the utterances of the experimenter and the subject. To bring out the point of the thought experiment more dramatically we will let *S* and *E* be the same person, that is, we will suppose that *S* is indirectly observing the relevant evidence in own brain functions.

Now suppose the examiner *E* asks the subject *S* whether it is true, that if the truth of any statement implies the truth of any other statement, and the first statement is true, then the second statement is true. The subject knows this is true and is presently judging that it is true.

But suppose that *E* (also *S*, in this case), to his amazement, observes that the instruments indicate that *S* believes *MP* to be false. The machine detects, *via S’s* brain state, that *S* is having a belief, i.e., holds that some proposition is true, detects what the content of belief is, i.e., the denial of *MP*; and “knows” that the proposition represented by that brain state *must* be true (It is programmed to “know” such things, but, of course, only for *analytic* truths. We are assuming that the instrument is correctly recording *S’s* brain state, which is, that correct results have been obtained so often as to make experimental error extremely unlikely).<sup>4</sup>

Of course the issue here is not which, *S’s* brain or *S’s* conscious judgment, *E* (also *S*, in this case) should believe; it is what *kind* of relevance *S’s* non-conscious brain state can have to *S’s* knowledge of -- his justified true belief about -- *modus ponens*. The same issue of relevance would arise if the instrument had recorded a “true” brain state. There is, of course, a sense of ‘because’ in which it is true that *S* knows what he does know in part “because” his brain is in a certain state; but that is not the sense of ‘because’ in which (*pace* externalists) it is true to say that he is *justified* in holding the belief relations expressed.

Even if all and only true beliefs were brought about by a certain line of natural, i.e., nonnormative, causes, that fact could play no conscious epistemic role in the subject’s

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<sup>4</sup>There is also an apparent Davidsonian problem here, but it is only apparent. If *S* (or her brain) always or usually gave responses that were wrong “by *E’s* lights” – especially on matters of elementary logic -- *E* ought to conclude either that *S* is not a language user, i.e., not a rational subject, or that *E* has failed to translate her language correctly. In either case, if the device is correctly reporting *S’s* brain state the thought experiment could not have the supposed result, for *E* could always save appearances by reinterpreting *S’s* utterances or by rejecting her rationality. It is to block this move that *S* is to play both her role and *E’s*. (The objection could be technically sidestepped from a strictly third person perspective by supposing only a single misfire by *S*, who is generally on target, but that would be to miss the point.) In fact, it can be shown that the Davidsonian problem affects only what *E* is entitled to believe about *S’s* thought (when *S* is not *E*), not what *S* herself is entitled to believe about her own present thinking.

thinking himself justified unless, at a minimum, he *knew* that they were so brought about. But if he knew that, he would cease to think himself justified in his belief about *MP* (and in his belief that all and only his true beliefs were so caused). For he would realize that no such event could be related to his beliefs in the way his need for justification requires; that is, it would not be *conscious, rationally compelling evidence*, but only an ontologically compelling efficient cause (to borrow a term from Aristotle). If we dismiss the notion of a cognitively normative cause as mere mystification, we thereby lose the very notion of mystification; for what could mystification be if not an attempt to divert attention from the epistemic norms and evidence that, if attended to, would remove the mystery?

From the "perspective" of the conscious subject, natural causes have the same relation to rationally normative justification that breaking and entering has to being in legitimate possession of a key. If one is to have a justified true belief that the moon is presently shining in the sky, it is not enough that the moon be an efficient cause of his sense experiences and that the sense experience be an efficient cause of his belief (whatever the latter might mean). He must see the need for epistemically convincing evidence for this empirical belief and must understand -- consciously understand -- that his present visual experience is good evidence for that belief.

Absent this normative consciousness, the moon *cannot* cause a justified true belief about itself [or, it is possible to show, cause any belief at all in a rational subject (Hodes, 1997, p. 127-28)]. Judgments about perceptions are often so simple and rapid that we do not advert to our application of these normative criteria; but if we do not apply them at all, we are not in fact justified in our belief. Nor, properly speaking, could the causal efficacy of the moon make the belief that it is shining in the sky *true*. The belief is "made" true or false just by the moon being what and where it is. Of course, if I also believe that it is having such a causal effect, then its having that causal effect will make that further belief true, but only by virtue of that causality being what it is in relation to me, not by virtue of its doing what it does to me.

Perception is also normatively constituted in part, although this is more difficult to see. If I am perceiving *P*, that is because, in the relevant sense of 'because', my perception has *P* as its content or object, not because, again in the relevant sense of 'because', *P* is an efficient cause of my perception. If *P* is a mental representation of an extra-mental object, it is a representation of that object by virtue of its having some sort of likeness to it --- by virtue of "measuring up" to the descriptive norm set by the object, not because -- again, in the relevant sense of 'because' -- the object is its efficient cause. Both an extra-mental object and Descartes' evil daemon might be an efficient cause of my perception of a red patch, but that would not mean that in the latter case I am not perceiving the red patch or that it does not resemble an extra-mental object, if in fact it does.

If I know (somehow) that my percept *P* is caused by an extra-mental object *P'*, and I also know (somehow) that what is caused to appear in my mind in this way resembles its cause, then I will know that *P* resembles *P'*. But I could only know this by an inference that is itself normatively controlled; and, again, *P* will resemble *P'* because-- in the relevant sense of 'because' -- it is like *P'*; not in virtue of its being caused by *P'*. Even a resemblance between

physical objects, although it would, of course, consist of a physical relation, is, strictly speaking, constituted by a “formal cause,” (to borrow again from Aristotle), not an efficient cause<sup>5</sup>

Notice, also, that an epistemic relation must not alter its object. For, obviously, one does not perceive or know *P* by perceiving or knowing *Q* instead: that is, by perceiving or knowing what *P* has been changed into in the process of trying to perceive or know it, and what *Q* will become in the process of trying to perceive or know it, and so on, *ad infinitum*. (This fact, which seems to me to be an epistemic axiom, has obvious implications for certain accounts of how quantum wave functions are collapsed, but this is beyond the scope of the present discussion.) Any account of cognition which makes knowing identical to, or emergent from, a set of causal relations risks violating this condition; for causes are also altered in bringing about their effects.

The point is that all epistemic relations -- “causalities” -- are constituted, at least in part, by normativity, whether the relation be that of perception or truth or justification. The unsettling implication seems to be that, for us as conscious knowers, neither the causal effect of an external object on an epistemic subject nor the supervenience of one's beliefs on one's brain states can, by themselves, constitute our perceiving or knowing, or make our beliefs either true or justified.

These kinds of normativity must be consciously present and controlling if we are to know anything about the hard problem, and, as previously noted, the possibility of such normativity will also be part of what the theory must reconcile with the facts of physics.

### **Cognitive Intentionality: Knowing the Self and the Other**

The higher-order cognitional operations described enable us to know ourselves and what is other than ourselves. This is, surely, the most impressive form of intentionality. For when one knows that such-and-such is the case, one knows it consciously. If what one knows is other than one's self, one knows it *as it is* and *as other*; and if one knows one's self, one knows one's self *as one is* and *as one's self*. This sort of intentionality, in which the intender and the intended are intimately related while leaving the intended intact, is unique to rational consciousness. It is the most interesting example of the point, noted above, that epistemic relations must leave their objects unaltered.

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<sup>5</sup>With regard to phenomenal judgments and beliefs, Chalmers and I seem to be in substantial agreement, differences in terminology notwithstanding. He argues that such beliefs and judgments (for example, *I am seeing a red patch*) are directly justified by the consciousness of the phenomena content itself: “They are not *mediated*... by some sort of causal chain [and therefore are not entirely, or at least not exclusively, explicable by functionalist, third-person accounts]. They are *part* of my epistemic situation, and simply having them gives evidence for some of my beliefs ...” (Chalmers, 1996, p. 183.) Chalmers sees this as a potential “paradox” because it compromises the tidy distinction between phenomenal consciousness and non-conscious, functionally explicable, cognition. His “causal chain” seems equivalent to my “efficient causality” and his “being part of my epistemic situation” amounts to my “normative cause.” We differ in that Chalmers apparently holds that higher-level cognitions, including the act of judging in phenomenal judgments, are not part of the any conscious “epistemic situation” at all, and certainly not as properly conscious. See Chalmers, 1996, pp. 177 ff.

### **First-person Cognitive Unity**

Viewed from the first-person perspective and in philosophical innocence, one's being a cognitional subject in the way described does not seem to be merely a matter of a non-conscious item having the property or function of consciousness in the way that an apple has the property of being red or “wetness” emerges from the union of hydrogen and oxygen. The / which from time to time experiences, understands, and decides what it is justified in believing (and what to do and how to live) forms a functional whole: a stable, if intermittent, conscious identity which, *prima facie*, qualifies as an ontologically basic item at least as well as does an electron (from a first-person perspective, it is the electron that lies beyond one's acquaintance and is subject to the uncertainties of empirical knowledge). There could be no knowledge if the data to be explained were present to one consciousness, the hypothesis to a second, the verifying data to a third, and the insight that the data verifies the hypothesis to a fourth. There can be no “division of labor” here, and the conscious self that actively and reflectively integrates the labor must be more than a mere “background hum.”

Of course we lose our innocence when we consider that minds are profoundly dependent upon brains and set about finding out how such radically incommensurable items could be so intimately related. But however much or little ontological weight one is willing to attach even provisionally to the unity of a rationally conscious subject, it remains that the conscious, functionally integrated acts of experiencing, hypothesizing, understanding, and judging rationally are not nothing at all. Nor is the conscious subject who performs these acts (You, reader) nothing at all. On the contrary, we are, at least in part and at times, just those sorts of evidently real items which engage in just such acts and, it is to be hoped, will eventually solve the “hard problem” by means of them. Nor do we perform these acts non-consciously -- while standing outside our consciousness, as it were. Perhaps our brains do this; but we, as subjects who consciously have experiences, exercise intelligence and judgment, and respect the constraints and norms inherent in them, do not.

So consciousness, or at least rational consciousness, exists (somehow) as an integrated whole, and if we are to understand consciousness we must account for this feature of it and show how it is related to the unity of physical objects.

### **V. Why we resist the suggestion that higher-order cognitional events are conscious**

For the most part, resistance arises from three beliefs that may or may not have been explicitly formulated. Two of these can be dealt with very briefly; the response to the third will require a separate and lengthy discussion and will constitute my argument for the claim made above in Part II that the usual kinds of qualia and phenomena cannot supply what is required for the conscious higher-order-cognition. Again, I will attempt to weaken resistance by appealing to quite elementary insights --- the sort evoked in introductory philosophy courses. The sources of resistance, together with my responses, are as follows:

- (a.) We have for a long time used ‘cognition’ and ‘consciousness’ to refer to non-conscious states or functions, and until recently we have been committed to the view that that is all these expression could or should mean. If good arguments have now convinced some of us that this is not true for qualia, nevertheless it is understandable that we give further ground rather reluctantly. Indeed, it is only prudent to resist proposals to extended consciousness to higher order epistemic events -- the “hard problem” is hard enough as it is.

But are the arguments for extending consciousness of the proper kind to these events good or are they not? Is it, or is it not, important to have a reasonably adequate notion of what consciousness is? In philosophy, as elsewhere, to the incautious belong mistakes, but to the bold and clearheaded belong the correct view.

(b.) We can already explain some of these cognitional operations and their contents functionally, in terms of neural networks, and the like, and we have good reason to expect still further successes. This is not the case with qualia, which must, therefore, be approached differently; but work on higher order cognition requires no such radical change in viewpoint and should proceed along functionalist lines or, at least, without any attribution consciousness.

The difficulty with (b), as I have been at pains to make evident, is that it has not been shown how non-conscious brain events can constitute, or even result in, our consciously knowing about the hard problem or anything else. The fact that we do not see how to give a functional account of phenomenal experience ought to suggest, it seems to me, that the functional account we can give of cognition is not adequate either.

(c.) If the cognitional acts described are conscious at all, that consciousness must be like the phenomenal or qualia consciousness, since that is the only kind of consciousness there is. In any case, in understanding phenomenal or qualia consciousness we will have captured the essence of what it is to be conscious, and that will tell us all we really need to know about any other kind of consciousness, if there is any other kind.

As warned, the response to (c) requires a separate discussion.

## V. Disqualifying “qualia-zombies”

It is time to make the case for rejecting option (I) listed in Part II and its expanded version in (c) immediately above [Hereinafter, simply ‘(I)’]. The “picture” of consciousness as the ability to experience sensations, mental images, mental sounds, pains, pleasures, “raw feels,” affects, and the like) is the deepest source of resistance to the view I have been advocating. I have delayed discussing this notion of consciousness until the function of each of the higher-order cognitional acts constitutive of conscious, rational knowledge was made explicit, and until we had faced up to some of the commitments acknowledging these sorts of consciousness brings with it. The consciousness proper to each of these acts can now be contrasted with phenomenal or qualia consciousness to show that the latter cannot furnish what is required. However, in the nature of the case, the burden of proof must to a considerable extent fall on the proponent of (I). It is not enough simply to reject the possibility of conscious mental events that do not look, sound, imagine, touch, “affect” or, in general, “appear” like anything. Advocates of this view must make at least a *prima facie* showing that mental events which do “appear” in this way, the usual qualia -- *can* supply the requisite intellectual consciousness. Absent such a showing, (I) implies that all our “knowledge” is non-conscious and, therefore, that its advocates have no conscious knowledge of this or any other fact.

It should be evident from the previous discussion that a plausible defense of (I) will not be easy. Consider our introspective attempts to find qualia that can constitute our consciously holding a proposition hypothetically. Like Tye, and Hume before him, we find only

the usual mental images, sounds, raw feels, affective states of various kinds, word or symbol tokens. But none of these seem to fill the bill, for, to repeat Strawson’s point, one could experience all these and not be hypothesizing at all. One might identify a “feeling” of hypotheticalness,” as Hume identified a “feeling of conviction”; but this would be to gloss over, rather than illuminate, what is distinctive of this stage in cognition.

Hypothesizing is not a mental image or sound; it is not an affect, like joy, or a sensation, like pain, or an achievement of the imagination, like a “sense of reaching out to the world.” The consciousness that we are *only proposing* a solution and that verification is needed if there is to be knowledge is constitutive of the act of hypothesizing, just as consciousness of the need for an hypothesis is constitutive of the very notion of understanding data as distinct from merely experiencing it. And although it is “like something” to be in such an hypothesizing frame of mind, what it is like, if it is to be any cognitive use to us as conscious knowers, must be *properly* conscious. The “what-it’s-like” of hypothesizing has a cognitively indispensable function and must not be reduced to, or explained in terms of, something else, whether conscious or non-conscious; for it is the hypothesizing frame of mind *itself* which we hope to promote, through evidence of which we are conscious, to rational conviction. If hypothesizing is lost to consciousness, we lose as well the notion of verification: We lose our grip on the difference between a mere proposal and a proposal that is justified and thus known to be correct (and we lose as well our grip on the notion of a rationally justified rejection of conscious higher-order cognitions).

If we substitute a certain kind of propositional attitude or dispositional state for the hypothesizing frame of mind, we must inquire whether *that* state or attitude is conscious or non-conscious and, if conscious, just what kind of “what-it’s-likeness” it must have in order to do its cognitional job. Thus we are back where we started -- with a conscious state, essential for cognition, which is notably unlike any of the qualia in Chalmers and Tye’s lists.

The same point can be made about understanding the sense of a general term. We have seen that although mental images have space-like, sound-like, and other quasi-sensible properties, what one understands when one grasps the intension of a general term does not. What is more, it is the very fact that the sense of such a term is *not* another mental image that gives it its epistemic use. For it is one thing to experience a number of extended objects or mental images and quite another thing to grasp the general notion of extension which applies, and which we consciously understand to apply, to an infinite number of extended objects that we have not experienced and of which we can form no mental image. The former is data or potential data to be understood; the latter is an act of understanding itself.

The concept *distance* does not do its cognitional job by instantiating a distance mentally, nor does it inform us about distance by instantiation a mental distance which “stands for” *distance*. (How would we know that it “stands for” anything or what it “stands for”?) Its job is to provide us with an intelligibility that one or more items may or may not possess. If concepts do not function in this way they serve no cognitional purpose.

One can argue that although the intension of a general term is not a mental image or mental sound, it is nevertheless some other qualia more or less like those listed by Chalmers and Tye. Or one can offer an account in terms of a propensity to utter certain sounds or behave in a certain way under certain conditions. But at the end of the day what one has identified had better be something that exactly fits the need that does the job for our consciousness that understanding the intension of a general term does.

Or consider a justified true belief. We have seen what the features of the cognitional acts that constitute knowledge must be. What qualia at all like those usually inventoried have these features? What images, sounds, word tokens, feelings, affects, "sense of reaching out" constitute your knowledge, your conscious, occurrent, justified true belief, that (say) Godel's incompleteness proof is formally correct and sound under at least one interpretation and always will be or that the implication of general relativity that there is no cosmic "now" has been empirically verified to a high level of probability? If we insist that this kind of consciousness must be like the usual kinds of phenomenal consciousness it will seem to be no consciousness at all. But if there is no such consciousness, we are left with "qualia-zombies" -- items whose consciousness is confined to qualia -- and a corresponding theory of 'cognition' which we, as qualia-zombies, can never consciously understand.

Again, the act of referring is not constituted only by its referent, whether that referent be "in our heads" or "out there." Referring is, at least in part, something a referring subject does; it is neither non-conscious, like the growth of one's fingernails, nor an object of consciousness (though it can become such, as in the forgoing references to referring). Moreover, one's referring, like one's hypothesizing, must have just those conscious features that distinguish it from other conscious acts if it is to fulfill its proper function. If we find this way of viewing reference odd, even wrongheaded, it is because we are accustomed to thinking of reference as a relation between brain events or linguistic items and the world, while ignoring the consciousness of referrer and of the person who is being referred to something.

But what qualia-like item in the referring subject's mind is a plausible candidate for the referrer's part in the act of referring? Word tokens (or types, for that matter) only refer if a subject consciously uses them to refer. Nor do we succeed in referring by conceiving the concept *referring* and then somehow using that concept to refer. (Don't we know the difference between using the sense of "brightest planet in the morning sky" to refer to Venus and merely considering this description with no intention of referring to anything by it? Don't we know when we are referring or trying to refer and when we are merely considering the concept of referring?) And when we refer, are we referring non-consciously or with consciousness only of what we are referring to?

Whatever the status of the object referred to may be, the referring itself is, at least in part, an intrinsically conscious act of a certain kind having a certain purpose and a certain (at least, attempted) relation to an object that together *constitute* that very consciousness. And whatever puzzles about referring remain; it is certain that an act of referring which relates the speaker and her auditors to the referent non-consciously is linguistically useless to us as conscious subjects.

If one thinks that the act of referring is the result of, or consists in, a causal relation, one must ask whether that causal relation or its result is conscious in the right way; for again, if it is not, the causal relation will be of no linguistic use to us as conscious subjects. Normativity applies here as well; for it is not the thing referred to that brings about the referring relation by being its efficient cause, but rather the consciously referring subject who must (somehow) create the right sort of relation to the referent.

Again, if conscious referring is eliminated in favor of something else, what will have been eliminated will be the very possibility of referring; for, to repeat, referring must have just the conscious features it has if it is to play its role for us as conscious language users. If

we know that someone’s cognitional acts or referring expressions have wide content, that is, “content” of which he is not conscious, we do not know or refer to this fact by virtue of something of which we are not conscious. Externalist theories, which close off meaning, reference, or justification from consciousness, simply miss the point of language and cognition. Narrow is the gate and conscious is the way to linguistic and cognitional salvation (See Chalmers (b) and (c) for a partly externalist theory of meaning).

I suggested above that knowledge itself should be viewed as intentionality in its most impressive form. If the account given in Part IV is correct, we know what sorts of conscious operations and contents constitute knowledge for us as conscious subjects. But it should now be evident that, once past the level of empirical experience or imagining, these operations and contents are not at all like the usual qualia. It is true that understanding and the content of understanding are like phenomenal experience in that, in some broad sense, there is something “it is like” to have them: If it is not already “like something” to someone to be reasoning or suffering, no argument can make it so. But the experiences, the kinds of consciousness, involved are quite different, as I have been trying to make clear.

## VI. Conclusion

Thus, of the options set out at in Part II, only the last, (2), remains. To deny that the higher-level cognitional acts described are each consciousness in their distinctive features is either to deny the possibility of understanding and solving the “hard problem” or any other problem (and to deny the possibility of consciously knowing that we have so decided), or to attribute to qualia and phenomena like those usually inventoried features that they patently lack. We may indeed have experienced a great many qualia like those Chalmers and Tye list, which our brains may “understand” but which we, as conscious subjects, do not. And if these cognitional operations and motives are conscious, they, with all their distinctive features, will be part of what must be integrated into a complete and correct psychophysical theory, a theory that can only be achieved by employing those same operations in response to these very motives.<sup>54</sup>

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<sup>54</sup>Some of the language, much of the argumentation, and all of the epistemology and ontology of this paper is that of B. Lonergan 1992. For an introduction to Lonergan see Meynell 1991.

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