Weekly ‘Question of Interest’ – 30 Jan 12

My questions this week concern Chalmers’ two-dimensional semantics as he presents it in the appendix to The Character of Consciousness.

First, I’m not quite sure what ‘two-dimensional intension’ is meant to accomplish in Chalmers’ theory. What work does it do for him? It is supposedly a function from an ordered pair of scenarios and worlds to extensions. I don’t understand exactly how this is supposed to work. I’m assuming that the extensions the function produces are an ordered pair of primary and secondary intensions. According to Chalmers, “…the two-dimensionalist need not hold that an extension’s primary and secondary intensions are derivative from its two-dimensional intension” (547). Why even talk about it in the first place then, or about the equally confusing ‘diagonal intension’? The only sense I can make of Chalmers’ writing here is somewhat generic: there are ‘two dimensions’, or two senses (?), of intension that Chalmers advocates. But his writing concerning two-dimensional intensions, diagonal intensions, and intensional matrices is very confusing to me, and somewhat beside the point. Am I missing something? I don’t actually seem inconsistent with my answer to the first criticisms.

Second, epistemic possibility ultimately provides the grounds for Chalmers’ ‘primary intension’ via ‘inferential roles’. However, and this is a bit pedantic, Chalmers’ presentation of epistemic possibility using Kripke’s examples seems somewhat off the mark. He states, “Even Kripke allows that ‘water is not H2O’ is epistemically possible” (550). An excerpt of what Kripke actually said is, “…if the world could have turned out otherwise, it could have been otherwise...Nor can you evade the difficulty by declaring the ‘might have’ of ‘might have turned out otherwise’ to be merely epistemic, in the way that ‘Fermat’s Last Theorem might turn out to be true and might turn out to be false’ merely expresses our present ignorance, and ‘Arithmetic might have turned out to be complete’ signals out former ignorance” (N&N 1980, 141, italics in original). Kripke’s point, as I read him, is that it was possible that water might not have been H2O. In other words, before the discovery that water is H2O (in the actual world), it was epistemically possible that water is not H2O (again in the actual world). This simply expresses our epistemic state of metaphysical ignorance at the time. If this is correct, I will assume that Chalmers was being somewhat careless here, considering his proposed ‘scenario’ includes an individual and (I’m assuming past and/or present) time ‘stamp’ at the ‘centered’ world under consideration.

Lastly, I am sympathetic with the last objection Chalmers mentions in the appendix, the “Objections to the role of apriority” (567). It seems that Chalmers is allowing empirical a posteriori information to “sneak in” to the content of his a priori expressions. For example, he states “The primary intension of a token of ‘water;’ very roughly, picks out clear, drinkable liquid with which the individual at the center is acquainted” (547). Aren’t many of these qualities that supposedly ‘pick out’ the primary intension of a token term themselves empirical?
Nathan Lindsey  
Philosophy 5331  
Professor Clark  
January 30, 2012

Week 3 Questions

1. The “simple argument” against 3rd-person data wholly explaining 1st-person data found on page 39 is very unsatisfying to me. This dissatisfaction stems from the third premise: “Explaining structure and dynamics does not suffice to explain the first-person data.” The justification for this premise is found in the previous chapter, where Dennett challenges him to produce some evidence for the view that experience is something beyond an account of cognitive functions. Chalmers’ reply is that this fact “is prima facie obvious to most people” (33). As such, Chalmers believes that he holds the field, so to speak, and Dennett is the one who must produce arguments to displace the received view.

While I am not against this dialectical strategy in general, there is I think a major issue with its application to this debate. Chalmers wants to rest on the intuitions that all people have about our conscious experiences. But this does not seem like the relevant domain of inquiry. The Folk (even Tufts undergraduates) are not sufficiently acquainted with reductivist theories to offer substantive intuitions about them. It is obvious that a majority of people will resist equating something with which they are intimately familiar with something with which they have no familiarity at all. If we are to do philosophy by assessing intuitions, we should do so with those who fully understand the question. Scientists and philosophers of science would fit this bill nicely, and I have a feeling that surveying them would give a different result. If it does, then by Chalmers’ reasoning, Dennett would hold the field and would have to be driven from it by positive
arguments—arguments which Chalmers does not offer. Without such, the third premise is unsupported and the above-mentioned argument fails.

2. The idea that scientists have trained monkeys to report changes in their subjective experience—as opposed to, say, changes in perceptual content—seems dubious to me. The issue here is one of confirmation. How could the scientists know that their efforts have been successful except by 3rd-person observation? This seems to run counter to Chalmers’ claim that 1st-person data is not wholly explicable by 3rd-person data. If the only way that the scientists can interpret the monkeys’ signals is by 3rd-person observation, then there must be some bridging principles relating the two. But as the discovery of such principles are the goal of the science of consciousness, it does not seem that we are licensed in using them to further the gathering of data in support of that science.

3. Chalmers claims that verbal reports are a means of making 1st-person data intersubjectively available. This would seem to get around the worry raised in the previous question, because we do not need to rely on observation to bridge the gap from 1st- to 3rd-person. In this case we use language, and since subjects and researchers speak the same language, the gap seems to be crossed effortlessly. But given what Quine has shown us about the indeterminacy of translation, it is difficult to see why we should believe that the words a subject uses to describe a 1st-person experience would be the same words that we would use to describe our own 1st-person experiences.

This is not a private-language argument. I don’t think there’s an important question about whether competent language-users mean the same things when they use the same words. This seems fairly obvious, and I take it to be due in part to the constant
publicly-accessible comparisons that are available to all competent language-users. The opportunity for such comparisons seems to be lacking in the case of 1st-person experiential reports, and the language that we use to describe these experiences seems incorrigible in a special way. As such, I don’t think it is really intersubjectively available in the way that Chalmers claims.

4. Is “having an experience of a certain color in the center of one’s visual field” (50, my italics) any different from seeing a certain color in a certain place? I am particularly puzzled by the italicized portion. I have a difficult time understanding what is meant by “an experience of red” or “what it is like to see red” apart from seeing red. But that difficulty aside, this sentence seems to locate the experience spatially. Is Chalmers saying that there is really a different experience to seeing a dot 2-degrees to the right of an earlier dot presentation? If so, then I think this raises questions vis-à-vis the prima facie foundation of his position, because I doubt the folk would agree that these two scenarios feel different from one another.
I'm having trouble understanding the distinction between first person data and third person data, mainly as it's used to talk about the privacy of first person data (on pp 49-50). A list of what would count as first person data (p 38) includes visual experiences, mental imagery, bodily experiences, etc.; third person data, on the other hand, concerns behavioral and neurophysiological matters.

In his discussion of privacy as a roadblock (p 49), Chalmers says:

In practice, by far the most common way of gathering data on the conscious experiences of other subjects is to rely on their verbal reports. Here, one does not treat the verbal reports just as third-person data (as a behaviorist might, limiting the datum to the fact that a subject made a certain noise). Rather, one treats the report as a report of first-person data that are available to the subject.

(The verbal reports made by subjects are first person data.) They aren't written off as third person data about structures and functions, but are instead taken as real first person data. I think that Chalmers is on board with scientists taking verbal reports as first person data, but if that's the case, then the distinction between first person data and third person data collapses. What appeared to be paradigm cases of first person data on the list (p 38) were the difficult-to-describe experiences, like what it's like to see red. But now what also counts are, for example, subjects saying that they see red, which sounds like third person data.

At first, I thought the distinction was supposed to show how first person data had a special connection to qualia, or rather, that first person data could be qualia. But now I'm not sure what role the distinction between first and third person data plays in a Chalmers-style science of consciousness, or whether taking verbal reports as first person data makes qualia irrelevant.

---

| Nathan Sheff [nathan.sheff@uconn.edu] |
| Sent: Sunday, January 29, 2012 23:30 |
| To: Clark, Austen |
My question of interest is in regard to a number of passages in *The Character of Consciousness* in conjunction with the ‘change blindness’ section of Dennett’s ‘The fantasy of firsts-person science.’ More specifically, these passages motivated the thought that the possibilities for Chalmers’ project are drastically under-described in ‘The Science of Consciousness’ and he has failed to distinguish the methods of the new science of consciousness from Dennett’s heterophenomenology (or his other opponents) by anything that Chalmers has argued is significant. Chalmers’ problem with Dennett’s heterophenomenology project is summed up by his statement that

> ‘The obvious objection to Dennett’s method is that the science of consciousness is not primarily about verbal reports or even about introspective judgments. It is about the experiences that the reports and judgments are reports and judgments of. Explaining our reports and judgments may be useful for many purposes, but to explain our reports and judgments is not to explain experience.’ (Chalmers, 54)

The allusion to ‘something left out’ is typical of Chalmers’ evaluation of the third-person scientific methodology and its investigation of consciousness. Thus, a response to Dennett’s claim that the change-blindness results cause a problem (in Dennett 2001) is straightforward – noticing change may be necessary for qualia, and you may be able to investigate the change in attention through third-person methodology, but you still cannot investigate the additional ‘what it is like’ to experience what was missed (or that it was missed for that matter) that accompanies the ‘noticing’. So Chalmers’ may remain steadfast in his conviction that first-person science is necessary for explaining this additional phenomenon.

But Chalmers’ methodology for the new science of consciousness should expect a similar response. The reason for this comes from his definition of the ‘neural correlate of consciousness’ and conjunction of the principle of verbal reports with the principle of global availability (Chalmers, 92-93). The overarching methodology goes something like the following: we are to find a neural correlate of consciousness, which is a neural system N (the size of which may vary significantly) that is sufficient for consciousness given that certain conditions obtain, by interpreting the verbal reports of subjects in such a way as to discover which cognitively processed information is available at a global level. This distinguishes Chalmers’ methodology from his opponents’ by not focusing specifically on the verbal reports (distinguishing him from most reductionists) and focusing on the global state of information and may give rise
to consciousness (distinguishing him from Dennett’s heterophenomenology and the possible investigation of the judgments underlying those reports).

The problem is that it is still unclear what Chalmers expects to gain by such a methodology. It is unclear what finding the neural correlate of consciousness will be able to say about qualia. One may rightfully say that even if a neural correlate of consciousness is found (one that is not merely necessary but sufficient for consciousness), explaining experience and the subjective quality of experience cannot be given in terms of neural systems. What has been given is a correlate — the same kind of thing that is taken to be explanatory (and presumably insufficiently so by Chalmers) in the change-blindness case.

What Chalmers has done is distinguished himself from his opponents, but he has only done so within a materialist framework. But this is not surprising, for what else is there to investigate but verbal reports, other behavior, and the correlating neural systems? Without a ‘consciousness meter’ there is no possibility for getting at something that cannot be explained by third-person science. Even if verbal reports are to be evaluated with the scientists’ first-person experiences in mind, consciousness does not seem to be distinguishable from the indicatory behavior — at least not by the methods described by Chalmers in part II. Without a methodological difference that is specifically designed to capture what Chalmers requires of a science of consciousness, it seems as though his project will fail to meet his own standards.

This would be a useful way of showing that the project, as described,
Question of interest

My question is on the NCC for content. It seems that NCC for content is one of the areas where some very significant research is being done. Chalmers seems to stress a lot on this kind of NCCs wrt to their significance for the “science of consciousness”. Yet it is not clear how and whether this kind of NCCs are even NCCs properly speaking. The main issue is that such NCCs have their content correlate with the content of consciousness. But that seems to be a different question than whether they correlate with the conscious experience itself. Have there been experiments to test whether these “NCCs” correlate with the experience or just the content? (I wonder too what form such experiments might take. The Logothetis monkey experiment at least on the highly limited description for it does not seem to differentiate these matters.)

The worry is if they correlate only with the content and not the experience then they have little part to play in an actual science of consciousness since what content an experience has (characterized in terms of its functional and structural characteristics and not the phenomenal ones) is part of the easy problem. Its an issue that is perfectly tractable in terms of functional or structural explanations. As such if the science of consciousness is the science looking to answer the hard problem (is that so, by the way?) then the NCCs for content may not have much role to play.

(and why would we need two states with matching content?)

or even more seriously: Suppose these N states can't have "phenomenal" content, so if phenomenal properties play any role in content then the two can't match in contents. (And Chalmers argues for "phenomenal intentionality" later)
Kathy Fazekas | Question of Interest 1

In various places1 in chapter 3, Chalmers refers either to content in a neural system or to content that is represented in a neural system. Later in the chapter, he mentions specific types of representational properties:

The power of single-cell studies...comes precisely from the way that cells can be monitored to keep track of the activity profile of neurons with known representational properties, such as receptive and projective fields. This allows us to track representational content in these neural systems and to correlate it with the apparent contents of consciousness. (84)

But he never clarifies what he takes content (or representational content) in a neural system to be (other than something that exists in the receptive and projective fields of some neurons).

He believes that there is a correlation between representational content in a neural system and representational content in conscious experience, as is illustrated by the following quote. “In the case of the contents of consciousness, we have a system N such that representing a content R in N directly correlates with representations in consciousness. So we can say:

representing R in N ↔ representing R in consciousness.” (71)

Chalmers goes on to question what the relation is between “representing R in N” (which I will subsequently refer to as N) and “representing R in consciousness” (which I will subsequently refer to as C). He questions whether N is necessary or sufficient or both for C. But his whole discussion of the relation between N and C is problematic if N does not in fact exist.

Chalmers’ discussion of finding a neural correlate for consciousness would not seem problematic if he had formulated the question as “what is the relation between a system of neural firings and the content of conscious experience?” It is his extra posit of representational content in the system of neural firings that seems dubious. What precisely does he mean by “the (representational) content of a neural system”?

1 Pages 65, 69, 71, 81, 84, 87, 89.
Even if he can answer this, it just seems like a category mistake for him to talk about neural systems representing content. Representation, if it occurs at all, is what occurs as a result of the whole process of what our brain is doing when it is processing information from sensory inputs. The mental image of a tree is a representation. If he is going to posit that conscious experience and neural processes are two distinct things (though connected by bridge laws), as he does, then it just seems incorrect to talk about “representing” going on at the neural level. In order for representing to be going on at the neural level, it would have to occur without conscious awareness, since, as Chalmers posits, conscious awareness is something distinct from what the neurons are doing. But it doesn’t really make sense to talk about representing occurring outside of conscious awareness because it seems like representation is a three place relation between that which is represented, that which is doing the representing, and that which is experiencing the representation as a representation.

Two possible replies: (1) that the notion of “information” could do the job; (2) that episodes of unconscious implicit perception show the kind of content needed.
Question of interest 1

maureen.stringham@huskymail.uconn.edu [maureen.stringham@huskymail.uconn.edu]

Sent: Sunday, January 29, 2012 18:52

To: Clark, Austen

One part I found interesting, and somewhat troubling, from Part II is the description of the experiment with monkeys and vertical/horizontal lines and how it relates to the discussion on contents of neural states. Chalmers says that if we take states of consciousness (to be the contents of particular experiences) rather than conscious vs. unconscious states or background states, the NCC will end up being a neural system N such that the content of N directly correlates with the content of consciousness.

My first question was, how can a neural state possibly have a representational content. A neural state is just what cells fire, not representations. Chalmers suggests using a cell’s receptive field to define its representational content (p. 66), which seems plausible.

Going back to the monkey experiment, the experimenters discovered that the cells in the primary visual cortex do not correlate with the visual experiences of the monkeys. The cells for vertical lines, and the cells for horizontal lines both fired, but sometimes the monkey has a visual experience of only horizontal lines. The experimenters concluded that the visual NCC is probably not in the primary visual cortex. The representational content of the neural state (which cells fire) in the visual cortex does not match the representational content of the visual experience. I wondered if the NCC could be in the primary visual cortex, even though the content of the neural state does not seem to directly correlate with the content of the experience. If both cells for vertical and horizontal lines fire, the neural state does not match. But perhaps one type fired before the other, and this determines which type of line the monkey experiences. In other words, the content of experience does correlate with the neural state in the visual cortex, but the experimenters cannot tell that there is a direct correlation because they cannot tell which receptive field fired first.

Maureen Stringham

"the bar is horizontal" vs "I see the bar to be horizontal"

vs "I am aware of seeing the bar to be horizontal." We'll talk about which of these is a "report of experience"
I found some of the claims introducing the discussion of bridging principles a bit perplexing. Chalmers' describes relying on pre-experimental bridging principles as something like "taking a leap of faith", and that all researchers are in the same boat as far as needing such principles (92). However, he goes on to suggest there is at least a bit of choice in how one takes this leap: "Of course, one can always choose to stay on solid ground, talking about the empirical results in a neutral way, but the price of doing so is that one gains no particular insight into consciousness" (92). So Chalmers' makes it sounds like the adoption of neutral language to talk about consciousness entails the loss of access to something important. However, it is unclear just what would be lost and just who would be losing it.

Chalmers' comment reminds me of the debate in the philosophy of science regarding what the aim of science is (or should be), and whether we gain or lose anything important by taking or failing to take the epistemic risk—believing that scientific theories are at least approximately true—required to adopt a realist position. In this debate the line between philosophers of science and scientists often becomes blurred, but I think it is important to keep in mind the differences between a scientific theory and a philosophical theory about science.

Similarly, while Chalmers' claim that researchers looking into consciousness must rely, at least implicitly, on bridging principles, there may be good reasons for keeping these principles implicit, viz., if the researchers are engaged in attempting to construct a scientific theory of consciousness. Were researchers to undertake the shift to making these principles explicit and then proceed to draw conclusions from them, they would be undertaking a fundamentally
different project, viz., theorizing about their nascent theory of consciousness. But this just does not seem like the target scientists and researchers are aiming at.

It is not immediately obvious that it should be of any significance whether a scientist is a realist or an antirealist, though taking a position on the issue is certainly important to philosophers of science. Similarly, while Chalmers’ suggestion may be a live and important issue for philosophers, it seems odd to claim researchers are losing out on important insights about consciousness by allowing bridging principles to remain implicit. Given the project researchers are engaged in—what I believe Chalmers’ would call the “easy question” of consciousness—the move to making such principles explicit seems at least under-motivated.

Our philosophy of science is just awful, and it is a very bad account of what’s actually happening in the sciences. But you need a lot of evidence with the science to show what’s wrong with it!