

Précis Of "The Possibility Of Materialism"

Mike Holliday

1) Introduction

David Chalmers has set out a well-known argument against materialism, based upon a distinction between the easy problems of explaining our mental processes and the hard problem of accounting for experience. This contribution to the ongoing debate over the nature of consciousness was intended by Chalmers as a proof that the materialists had to be wrong: that it was simply *impossible* for there to be an explanation of conscious experience in wholly physical or functional terms, and that we must therefore accept some form of dualism or perhaps even panpsychism.

Although this still strikes many as a strange conclusion, any critique faces a number of obstacles. The first is to obtain a clear understanding of just what Chalmers' argument actually *is* – something which has caused difficulties for many a critic over the past twenty years. The second problem, compounding the first, is that in his various publications Chalmers actually sets out a number of *different*, albeit related, arguments – including those based on familiar thought experiments concerning zombies, inverted qualia, etc. Thirdly, there is the contentious issue as to whether, as some claim, Chalmers somehow begs the question against the materialist. Fourthly, we must carefully distinguish between those comments which Chalmers makes *as a result* of reaching the conclusion that materialism is false, and comments which implicitly or explicitly act as premises for his argument towards that conclusion. Finally, it is important to disentangle the qualitative aspect of an experience, the *what it is like*, from the subjective aspect, that it is like something *for a particular organism* (Levine, 2001, pp. 6-7; Kriegel, 2009).

What follows might therefore be thought of as an *archaeology* of Chalmers' case against materialism – an investigation which aims to uncover the underlying form of his various arguments, together with their presuppositions and linkages.

2) The form of the argument

Central to Chalmers' case against materialism is the way in which he understands the nature of *explanation*: namely, that explanation depends upon the extent to which links can be established between concepts such that one set of facts entails another set of facts. The case of consciousness is unusual, claims Chalmers, in that there can be no 'conceptual hook' (2010, p. 123) by which to link our phenomenal concepts with physical or functional concepts.

Chalmers begins his key 1995 paper 'Facing Up to the Problem of Consciousness' (hereinafter, 'Facing Up') with the distinction between the easy problems of consciousness, which can be set out in terms of mental functions, and the hard problem of accounting for experience – which *cannot* be characterized in functional terms. This distinction provides Chalmers with a premise for his argument, a premise which we can parse thus: experience is the one mental phenomenon which is not explainable as a function. We can therefore summarize the argument in 'Facing Up' as follows:

- (1) Physical accounts can only explain functions or yet more physical structure and dynamics;
- (2) But experience is not explainable as a function (nor, presumably, is it explainable as physical structure or dynamics); hence
- (3) There can be no physical explanation of experience.

Chalmers has said (2010, p. xv) that the argument in 'Facing Up' is more fundamental to the case against materialism than the well-known thought experiments in *The Conscious Mind* (1996), since the latter turn on points concerning structure and function similar to those made in his earlier article. In fact, the substantive difference between the argument in 'Facing Up' and that set out in *The Conscious Mind* is that the latter formalizes the notion of 'explanation' in terms of the a priori entailment of facts.

We can therefore envisage a 'master version' of the argument against materialism which would succinctly and clearly set out the form of the argument concerning structure and function that appears in 'Facing Up', whilst also taking into account Chalmers' formalization of the nature of explanation. Fortunately, Chalmers himself has provided such a formulation (1999):

- (1) Physical concepts are all structural-dispositional concepts;
- (2) If B truths are to be entailed a priori by structural-dispositional truths, there must be some analysis of B concepts in structural-dispositional terms;
- (3) There is no analysis of phenomenal concepts in structural-dispositional terms; so
- (4) Phenomenal truths are not entailed a priori by physical truths

(where 'B' stands for some domain that is to be subject to reductive explanation).

The key premise here is (3). If we accept Chalmers' claim (1996, p. 104) that the only physical analysis of a phenomenal concept that is even remotely tenable is a *functional* analysis, then we can simplify this premise to: *There is no analysis of phenomenal concepts in functional terms*. However, rather than mounting any argument against the possibility of functional analyses of phenomenal concepts, Chalmers simply dismisses the idea: 'To analyze consciousness in terms of some functional notion is either to change the subject or to define away the problem. One might as well define "world peace" as "a ham sandwich"' (1996, p. 105).

The reason for Chalmers' refusal of any such functional analysis is that he is considering every aspect of an experience *as an explanandum in its own right* – as a phenomenon that is in need of explanation. For example, my experience when I look at the sky on a clear day has a bluish aspect to it, and even if I associate that aspect of my experience with cognitive abilities such as, say, recognition and discrimination, it is nevertheless possible to 'carve out' (Carruthers, 2004) the purely phenomenal aspect, the aspect which is characterized in terms of *what it is like*, to form a separate concept that can *only* be characterized phenomenally – as, say, 'bluish'. It would not appear to be possible for *that* concept to have anything of the functional about it which could provide the basis for an a priori entailment; the orthogonal nature of the two different sorts of concept would seem to preclude any 'conceptual hook' by which to link my concept of 'bluish' to functional concepts.

We can now see the strength of Chalmers' argument, in that it relies only on the nature of phenomenal and functional concepts, the nature of explanation, and an assumption which could only be denied by denying the manifest, namely that there is some phenomenal aspect to any experience. It thereby avoids any contestable premise concerning the nature or ontological status of experience or of phenomenal properties.

3) Why the 'master version' of the argument fails

Nevertheless, Chalmers' argument contains a fatal flaw: on his own account of meaning, what is important for a concept's inferential role is the concept's epistemic intension, a function which specifies how that concept applies in different situations. So what Chalmers actually needs to demonstrate, if he is to prove that a phenomenal concept cannot have an inferential role which could conceivably ground a priori entailments from functional facts, is that the concept's *intension* cannot be formulated or described in functional terms; how we characterize the concept itself is irrelevant.

Chalmers argues (2006, pp. 75-93) for *scrutability of reference*, and scrutability implies that, even if the criteria for applying a particular term are implicit and discoverable only by considering our dispositions to apply that term over a range of epistemic possibilities, there nevertheless must *be* such criteria. We can therefore view such applicability criteria as constituting a concept's epistemic intension, and as grounding the type of analysis that would be required for a reductive account of some phenomenon or other. Yet Chalmers' investigation of the applicability criteria for phenomenal concepts is remarkably limited. We might have expected him to follow his own injunction (1996, pp. 57-58) that an intension is to be ascertained by means of a detailed consideration of specific scenarios. However, he does not attempt this, but simply takes the applicability criterion for our concept of a qualitative aspect of an experience to be the instantiation, in someone's experience, of the relevant phenomenal property.

So the problem for the master version of Chalmers' argument against materialism is this: why can't the applicability criteria for a phenomenal concept be described in terms that relate to cognitive functions? For example, it might be that an investigation into how someone would apply their concept of *sky blue* to their experiences would reveal that they would do so if they could *recognize* the colour that they are experiencing as that which they term 'sky blue' and if they could *discriminate its relational properties* with respect to other colours as being those which they expect 'sky blue' to have, e.g. that there is nothing red or green about it, that it is not as deeply saturated a blue as navy blue, and that it is quite light in the same way that yellow is. If their experience meets those criteria, then they would say that their concept of *sky blue* applies to their experience. (It might be thought that the applicability criteria suggested in this example are not wholly non-phenomenal, since they refer to qualities such as sky blue, red, green, and so on. But these references can be to 'the colour I term *sky blue*', 'the colour I term *red*', and so on, where the term 'colour' simply refers to an area of the subject's visual field being filled in some distinguishable manner or other.)

Chalmers' error lies in not fully taking into account the distinction between (i) a description or characterization of a phenomenal property, and (ii) the epistemic intension of our concept of that property. What in fact mediates the connection between phenomenal and functional concepts – despite their apparently orthogonal nature – is Chalmers' thesis of *scrutability*: given sufficient information about the world, we are able to make rational judgments about what our expressions refer to and whether statements incorporating those expressions are true. We therefore have an understanding of how to apply our concepts in different situations, and should be capable (by considering a range of epistemic possibilities) of ascertaining their implicit applicability criteria. But precisely because those criteria *are* implicit, and the qualitative aspects of our experiences so ineffable and so familiar, it may not be evident to us that functional facts and phenomenal facts can be conceptually linked via the applicability criteria for phenomenal concepts. Of course, Chalmers' scrutability thesis is debatable; but if it is rejected, then a lack of a priori entailment from physical or functional facts to phenomenal facts would no longer entail the ontological conclusion that materialism is false.

4) The subjective/objective distinction

It might be objected that descriptions such as 'recognizing the colour I term *sky blue*' and 'discriminating the relational aspects of the colour I term *sky blue*' use *phenomenal* senses of 'recognizing' and 'discriminating', whereas what would be required for a materialist explanation of experience is reference to *objective* senses of recognition and discrimination that are describable in purely third-person terms – for example, in terms of observable behaviour.

This seems, at least on the face of it, an unlikely interpretation of Chalmers' argument, given that he normally sets out the problematic in terms of an experience's *qualitative feel*. However, Chalmers does distinguish (2010, p. 114) between 'functional representation' and 'phenomenal

representation', and explicitly characterizes functional representation as a notion of representational *behaviour*. By contrasting functional and phenomenal representation in this manner, it seems that Chalmers must indeed be reserving the term 'functional' for objective descriptions in terms of observable behaviour. But if this *is* a correct interpretation of Chalmers' argument against materialism, then any 'explanatory gap' is not between phenomenal qualities such as 'bluish' or the smell of a rose on the one hand and mental activities such as recognition or discrimination on the other: it is between the first-person and third-person viewpoints.

Now the objective, third-person viewpoint derives from the possibility of *inter-subject* agreement on facts, where that agreement can be obtained, at least in principle, from *any* competent observer placed in the relevant situation. Hence, the third-person viewpoint is not to be thought of as a perspective on some objective realm, separate from another realm which is accessible only from a privileged first-person viewpoint; it is instead a *generalization* of the first-person viewpoint. As Chalmers notes, scientific investigation of physical phenomena uses descriptions that can be put in terms of structure and dynamics; and we can surmise that the reason for this is that descriptions in those terms are capable of generating inter-subject agreement that is strong enough for an objective, scientific fact, being based upon *agreed measurement criteria* for observations concerning space (giving us objective *structure*) and time (giving us objective *dynamics*). However, this type of inter-subject agreement does not seem possible in respect of phenomenal facts: each experience is only had by a single person, and phenomenal facts are therefore not cognitively available to anyone other than the individual who is having the relevant experience.

So now we *do* have a reason why it is not possible for there to be a priori entailments from physical or functional facts to phenomenal facts: namely, that there cannot be objective applicability criteria, available in principle to any third party, for the use of a concept of a phenomenal aspect of an individual's experience. However, what guarantees this lack of a priori entailment is the 'interiority' or 'privacy' of experience, and we have at least plausible accounts of the development of interiority as a characteristic of higher organisms, for example those by Humphrey (1992) and Thompson (2007).

5) The arguments in *The Conscious Mind*

What does the preceding analysis of Chalmers' argument imply for the thought experiments in *The Conscious Mind* featuring zombies, inverted qualia, and Mary the super-scientist who has not yet experienced colours? The discussion so far suggests that these thought experiments gain their plausibility from a 'double distancing' of the qualitative aspects of experiences from objectively describable behaviour: not only is there an epistemic gap between my two notions of psychological terms such as recognition or discrimination, but I also intuitively think of the qualitative aspects of my experiences in terms of their *characterizations* – such as 'bluish' –

rather than in terms of the *applicability criteria* for my concepts of those qualitative aspects. Hence, I perceive no contradiction when I try to think of a being that is physically and behaviourally identical to a human being but which lacks the phenomenal qualities of conscious experience, i.e. a zombie.

This 'double-distancing' also leads us to think of the phenomenal aspects of experience as *intrinsic* properties – as being simply 'bluish' or 'reddish'. It is these supposed intrinsic properties which we conceive of as being inverted with respect to our mental activities in the 'inverted qualia' thought experiment. However, in the absence of such intrinsic properties there is no conceptual room for me to experience a colour which I recognize as that which I term 'sky blue' and which has those relations to my other experiences of colour that sky blue has, and yet for me to be actually experiencing a very dark red. As for Mary, the super-scientist in the black-and-white room – what she is supposed to learn is some new propositional fact, e.g. that when *other people* look at a red rose, they have an experience with the *same* property that she is experiencing when she sees a red object for the first time (Jackson, 1986). But in the absence of intrinsic phenomenal properties there is no such propositional fact for her to learn.

6: Chalmers and the phenomenal concept strategy

Chalmers has also put forward (2010, chapter 10) a separate argument against any attempt to provide a physical explanation of the epistemic gaps that arise in respect of consciousness – a materialist response which is often referred to as the Phenomenal Concept Strategy (or 'PCS').

Now Chalmers has already considered (2010, pp. 115-118) the position that he refers to as type-B materialism – which accepts the existence of the epistemic gaps but rejects any implication to a metaphysical gap – and argued that such a stance must rely upon either the assertion of a brute and unsupported identity, or some unjustifiable and unnecessary form of modality. So when he sets out to consider the PCS, Chalmers envisages that this particular variant on a type-B position will have to amount to *more than* just a claim that the nature of our phenomenal concepts results in an inferential disconnect from the physical facts, and will instead have to *justify* a rejection of the inference of an ontological gap from an epistemic gap. The PCS might attempt to do this, he says (2010, pp. 321-322), by showing how the epistemic gaps that we find in respect of consciousness could arise in a purely physical world, since that would constitute a counterexample to the claim that the epistemic gaps must imply a metaphysical gap. His argument is intended as a proof that the PCS cannot possibly succeed in showing this.

However, my suggestion that the epistemic gaps are due to the physically explicable interior nature of consciousness is *not* aimed at showing that those gaps can arise in a purely physical world, and Chalmers' argument against the PCS is therefore not directly relevant to it. My suggestion is instead targeted at Chalmers' general reasons for rejecting type-B materialism,

and in particular his dismissal of identity claims as brute and unsupported. We *do* have a rationale for thinking that there is some form of identity underlying the properties which instantiate two different types of concept: namely, that the mental processes of recognizing, discriminating, and so on that we conceptualize in first-person terms are *the very same mental processes* of recognizing, discriminating, and so on that we can conceptualize in third-person terms. Of course, Chalmers can try and repeat his strategy of arguing that the epistemic intensions of the former concepts are different from the epistemic intensions of the latter, but this would now be beside the point. We accept that the epistemic gap exists, but have a clear rationale for maintaining that there is an identity nonetheless, and that the properties that instantiate these two different types of concept represent two different ways of apprehending the same mental process. For Chalmers to insist that the relationship between those properties must instead be that of a fundamental law of nature would appear to be unmotivated – except in order to save his argument for dualism.

7: Interiority, exteriority, ontology

Suppose, just for one moment, that some sort of inter-subject knowledge concerning my interior mental activities *were* somehow possible. It does seem that no objective, third-person criteria could ever overrule the first-person criteria that I have for applying my concepts of those interior processes. For example, my criteria for saying that I am recognizing the colour which I am now experiencing as that which I term 'blue' is simply that I am aware that that is precisely what I am doing. Why would I instead use some roundabout route that relied on objective criteria, such as those relating to the observation of my own behaviour and the scientific measurement of the activity of the neurons in my brain? Or – supposing that it were somehow possible – the judgments of others who have access to my interior mental states? What this suggests is that the fundamental reason for the epistemic gap between the physical and the phenomenal lies not in the qualitative aspects of the latter, nor in the lack of third-person cognitive access to the experiences of an individual organism, but in the *existence* of interiority.

But the distinction between 'inside' and 'outside' is not just a matter of epistemology – that is, of understanding or knowing from an interior or exterior perspective. The evolutionary emergence of interiority is intimately connected with the emergence of *an exteriority* with respect to that interiority: in other words, there can be no 'outside' without an 'inside' (Thompson, 2007, chapters 5 & 6). This implies that it is not just exteriority which is intimately linked with the emergence of interiority – *so is ontology itself*. Objects and properties as such – carved out, as it were, from the rest of the universe – cannot be thought of as existing without some form of interiority which distinguishes them. If this line of thought is right, then our metaphysics must not take for granted the category of 'object', and thereby presume *at the outset* a distinction between 'subject' and 'object'. This would be a clear case of an

'inscription error' (Smith, 1996, p. 50), whereby we make – explicitly or implicitly – an initial ontological assumption, and then later read back that assumption or its consequences as constituting an empirical discovery or theoretical conclusion, without recognizing the dependence on the original assumption. We would have presupposed the existence of a realm of exteriority, together with an interior realm which in some way refers to, or reflects, that exterior realm; and by doing so, we would have taken for granted within our fundamental metaphysics the existence of reference and other forms of intentional participation in the world, and so be unable to explain them.

This, I suggest, is what Chalmers does by demanding that an explanation for the phenomena of interiority be given wholly in terms of the phenomena of a *taken-for-granted exteriority*, rather than in terms of *the development of interiority-exteriority as a form of dialectical unity*.

8: Conclusion

By carrying out an 'archaeology' of Chalmers' arguments, we have brought to light a number of singular features of his account of the epistemic gap between phenomenal facts and physical or functional facts.

Firstly, we discovered that Chalmers fails to properly distinguish between our intuitive characterization of the qualitative aspect of an experience and the applicability criteria for our concept of that qualitative aspect. This failure makes it appear plausible that phenomenal concepts differ so completely from physical or functional concepts that there can be no possibility of any 'conceptual hook' between the two types of concept, and hence no possibility of any a priori entailment from physical or functional facts to phenomenal facts. But we found that, contrary to first impressions, the qualitative aspects of consciousness do not of themselves lead to an unbridgeable epistemic gap.

Secondly, and closely related to the first feature, is Chalmers' tendency to implicitly assume that phenomenal properties must be *intrinsic* properties. Thinking about phenomenal properties in terms of their intuitive characterizations, rather than in terms of the applicability criteria of their concepts, makes it easy to view them, perhaps unwittingly, as intrinsic properties. Unfortunately, in making his case against materialism Chalmers appears to do precisely this at a number of key points: (i) in his neglect of any systematic investigation of the applicability criteria for our concepts of phenomenal properties (he simply takes the criterion to be the instantiation of the relevant intrinsic phenomenal property); (ii) when he has recourse to inverted qualia (without intrinsic properties there is nothing to be inverted); and (iii) in his use of the knowledge argument (the new knowledge that Mary supposedly learns is knowledge about *which* intrinsic phenomenal property is instantiated when other people observe, say, a red rose).

Thirdly, there cannot be objective, third-person criteria for the use of concepts relating to phenomena which by their very nature are only cognitively available to one person. It is *this* consideration which results in an ineliminable epistemic gap between the phenomenal and the physical or functional. However, the private nature of consciousness is scarcely mysterious, and can be given a plausible explanation in terms of the evolutionary development of interiority as a feature of complex organisms.

Fourthly, Chalmers assumes that any materialist explanation of consciousness must be provided in terms of an already-existing assemblage of objects and properties, rather than in terms of the co-development of interiority and exteriority as a dialectical unity. This is to take it for granted that the external realm is, ontologically-speaking, prior to the interior realm – an unwarranted assumption.

What this 'archaeology' points towards is the conclusion that the epistemic gap described by Chalmers has more to do with the nature of our own epistemological and ontologizing activities than it does with 'the basic furniture of the world' (2010, p. 18). In which case, a fuller account of consciousness will require a better understanding of those enterprises, rather than an acceptance of some form of dualist or panpsychic ontology.

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