Relationalism and the Problems of Consciousness

William Fish

RESUMEN
Los intentos recientes por mostrar que el procesamiento funcional entraña la presencia de conciencia fenoménica no han logrado dar el tipo de respuestas a los “problemas de la conciencia” que, según los anti-materialistas, los funcionalistas han de dar. En este artículo ilustro esto concentrándome en las tesis según las cuales hay un “problema difícil” acerca de la conciencia, y un “hiato explicativo” entre los hechos funcionales y los hechos fenoménicos. A continuación argumento que si complementamos las tesis funcionalistas con una concepción relacionista de las propiedades fenoménicas, podemos empezar a obtener una teoría naturalista de la conciencia fenoménica que proporcione respuestas intuitivamente apremiantes a estos problemas.

ABSTRACT
Recent attempts to show that functional processing entails the presence of phenomenal consciousness have failed to deliver the kind of answers to the “problems of consciousness” that anti-materialists insist the functionalist must provide. I will illustrate this by focusing on the claims that there is a special “Hard Problem” of consciousness and an “explanatory gap” between functional and phenomenal facts. I then argue that if we supplement the functionalist stories with a relationalist conception of phenomenal properties, we can begin to see the shape of a naturalistic theory of phenomenal consciousness that will provide intuitively compelling responses to these problems.

An interesting feature of recent work on phenomenal consciousness is that, whilst a core “anti-materialist” claim is that the key phenomenal properties of experience cannot be captured in functional terms, there has nevertheless been a significant thread in the “pro-functionalist” literature of the last thirty years that has attempted to do just this and explain why the functional truths do, after all, entail the truths about phenomenal properties. In this paper, I briefly lay out the opposing sides of this dispute and offer a diagnosis of why the pro-functionalist explanations have failed to convince before arguing that, if the pro-functionalist stories are augmented by a particular conception of phenomenal properties – what we might call a relationalist or
naïve realist conception – the missing piece of the puzzle will be provided. This will enable us to begin to see the shape of an intuitively compelling naturalist theory of phenomenal consciousness.

I

I will frame the discussions in this paper using the terminology of “phenomenal properties” as it is used by the anti-materialists. On this conception, a phenomenal property of an experience \( e \) is stipulated to be a property of \( e \) (for examples of this usage by high-profile anti-materialists, see Block (1995), p. 230; Chalmers (2004), p. 154). This usage conflicts with the way this term (and/or the closely related notion of phenomenal character) has been used by certain representationalist materialists. For example, Dretske contends that “the features that define what it is like to have an experience are properties the objects we experience (not our experience of them) have” [Dretske (2003), p. 67; see also Lycan (2001), p. 32]. On such a view, phenomenal properties could not be properties of experiences, but would rather be mind-independent properties: redness, squareness and the like.

Yet whilst the anti-materialist conception of phenomenal properties conflicts with this usage, it can nevertheless be extended in such a way that it captures Dretske’s insight. To see how, note that Dretske explains how these mind-independent properties come to characterize what it is like to have an experience with the claim that they are “properties the experience represents things as having” [Dretske (2003), ibid.; see also Lycan (2001), pp. 18-19]. On such a view, mind-independent properties characterize what it is like to have an experience in virtue of the experience in question representing that those properties are instantiated. But this means that, for any such mind-independent property, the experience itself will have a corresponding property – the property of representing that this property is instantiated – that can then be identified with a phenomenal property in the standard anti-materialist sense.

In this way I suggest we can maintain the heart of the conception of phenomenal properties that is employed in the anti-materialist literature, but do so in such a way that we do not thereby assume that Dretske is wrong. The key to this is to recognise that, whilst we can stipulate that phenomenal properties are properties of experiences, we cannot simply assume that they are intrinsic properties. As I will show, coming to terms with this feature of phenomenal properties opens the door to the very real possibility of an intuitively acceptable materialist theory of phenomenal consciousness.
II

Let us now turn to a central strand in the dispute between what I have been calling “anti-materialists” and “pro-functionalists”. Two important weapons in the anti-materialist’s armoury are David Chalmers’s claim that there is a “Hard Problem” of consciousness [Chalmers (1995); Chalmers (1997)] and Joseph Levine’s closely related claim that there is an “explanatory gap” between the physical/functional facts and facts about phenomenal consciousness [Levine (1983); Levine (2001)]. These “problems of consciousness” will be the focus of the present essay. After briefly outlining these contentions and extant responses to them, I will isolate just what the proponents of the hard problem/explanatory gap contend that an adequate functionalist response to these contentions needs to do. I will then turn my attention to outlining the pro-functionalist attempts to provide just such an explanation.

In introducing the hard problem of consciousness, Chalmers contrasts it with what he calls the “easy” problems: “The easy problems of consciousness are those that seem directly susceptible to the standard methods of cognitive science … The hard problems are those that seem to resist those methods” [Chalmers (1997), p. 9]. As examples of the easy problems he includes such things as our ability to discriminate and categorize environmental stimuli, to integrate information and to instigate behaviour. Yet even when all of the easy problems have been solved, Chalmers contends, there will still be important questions left over:

> Even when we have explained all the cognitive and behavioural functions in the vicinity of experience – perceptual discrimination, categorization, internal access, verbal report – there may still remain a further unanswered question: Why is the performance of these functions accompanied by a conscious experience?" [Chalmers (1997), p. 12].

> Why is it that when our cognitive systems engage in visual … information-processing, we have visual … experience: the quality of deep blue …? [Chalmers (1997), pp. 10-11].

These considerations are closely related to Levine’s contention that phenomenal consciousness brings with it an “explanatory gap”. Consider the following:

> We have no idea, I contend, how a physical object could constitute a subject of experience, enjoying, not merely instantiating, states with all sorts of qualitative character [Levine (2001), p. 76].
Let’s call the physical story for seeing red “R” and the physical story for seeing green “G”. … When we consider the qualitative character of our visual experiences when looking at ripe McIntosh apples, as opposed to looking at ripe cucumbers, the difference is not explained by appeal to G and R. For R doesn’t really explain why I have the one kind of qualitative experience – the kind I have when looking at ripe McIntosh apples – and not the other [Levine (1983), p. 358].

For present purposes, it will be instructive to break these issues down into two questions. The first question, which we might call the *Something It’s Like* question, is illustrated by the first quote from each of Chalmers and Levine and asks why functional (/ physical) processing is accompanied by phenomenal properties at all. The second, *What It’s Like* question is illustrated by the remaining quotes. It asks why functional processing of a certain kind is accompanied by the particular phenomenal properties it is. Although these questions are closely related, they are independent. In particular, as we shall see, an answer to the *Something It’s Like* question will not necessarily provide an adequate answer to the *What It’s Like* question. As things stand, however, a lack of answers to either of these questions is, at the same time, the lack of an answer to the hard problem and the source of the explanatory gap.

In his discussions of the hard problem, Chalmers suggests that there are two routes that the materialist might take. The first, type-A materialism, is to deny “that there is any phenomenon that needs explaining, over and above the various functions” [Chalmers (1997), p. 380]. In our terms, the type-A materialist denies that experiences have phenomenal properties.5 However, in as much as the notion of a phenomenal property was introduced in order to account for the special “what it is like” aspects of our experiences, simply to deny that there are such properties can seem to ignore those crucial aspects of consciousness. So those who were inclined to think there was something in the hard problem in the first place are going to find that, with no further explanation, this just doesn’t scratch the itch: “prima facie, there is good reason to believe that the question of explaining experience is distinct from the questions about explaining the various functions. Such *prima facie* intuitions can be overturned, but to do so requires very solid and substantial argument” [Chalmers (1997), p. 383].

This suggests that, to satisfy the intuitions that underlie the hard problem, the materialist would need to offer an account of phenomenal properties, or at least to explain how the phenomenal aspects of experience can be accommodated in a theory which does not make use of such a notion, rather than to simply deny their existence. This is the approach taken by Chalmers’ second kind of materialist, the type-B materialist, who “accepts that there is a phenomenon that needs to be accounted for, conceptually distinct from the performance of functions, but holds that the phenomenon can still be explained within a materialist framework” [Chalmers (1997), p. 387]. So the
type-B materialist accepts that there are such properties as phenomenal properties, but holds that they are in fact materialistically acceptable properties. For example, the Type-B Materialist might insist that phenomenal properties are identical to certain types of functional properties, or at least supervene on these properties with logical necessity.

How does this strategy respond to our two target questions? Well the Type-B Materialist can offer answers to these questions, but the answers will not be terribly illuminating: functional processing has to be accompanied by phenomenal properties because phenomenal properties just are functional properties; and functional processing of a certain kind has to be accompanied by the phenomenal properties it is because those phenomenal properties are identical to (some of) the functional properties that are instantiated by that processing. Yet once again this strategy is unlikely to preach to the unconverted. As Chalmers notes, in all other contexts, the postulation of an identity claim requires “an actual or possible explanation of how it is that two phenomena are identical”, but in this case, the Type-B Materialist “posits an identity in place of an explanation” [Chalmers (1997), p. 388]. What would constitute the kind of explanation that the proponent of the hard problem/explanatory gap is looking for? Chalmers and Levine suggest we need an explanation that makes it “intelligible” [Levine (1983), p. 358] or “transparent” [Chalmers (2007), p. 174] why the truths about phenomenal properties obtain, given that the functional truths obtain.

So the anti-materialist requires an explanation of why the truths about phenomenal properties obtain, given that the functional truths obtain. Now a significant strand in the pro-functionalist literature has attempted to provide just this. In a paper first published in 1975, Sydney Shoemaker argued that if we can have knowledge of the phenomenal properties of an experience, as he thinks we surely can, then those phenomenal properties must have causal consequences. He thereby concluded that a creature whose states lacked phenomenal properties could not be functionally identical to one of us. If this were so, then all the functional truths about us would entail that we were phenomenally conscious after all. And although Block [Block (1980)] pointed out some serious flaws in Shoemaker’s original argument, Michael Tye [Tye (2006)] has recently defended a version of Shoemaker’s contention by asking us to imagine that we perform an “exchanger operation” on him and his putatively non-conscious yet functionally identical twin, NN. This operation has the consequence that Tye loses all his phenomenal states other than his phenomenal memories and has them replaced by NN’s ersatz phenomenal states. Correspondingly, NN loses his ersatz phenomenal states and has them replaced by Tye’s true phenomenal states. As Tye and NN are, ex hypothesi, functional duplicates, an exchange of functionally equivalent states ought to leave them functional duplicates still. But as Tye points out, whilst it is reasonable to suppose that he will mourn the loss of his phenome-
nal states for merely ersatz ones, it is implausible to suppose that NN would mourn the loss of his ersatz phenomenal states given that he has acquired real conscious states! If this is coherent, it suggests that the presence or absence of phenomenal consciousness will indeed have functional consequences as Shoemaker originally suggested, and hence that the functional truths will, after all, entail the presence of phenomenal consciousness.

In addition to this kind of contention, which argues that functional duplicates of conscious subjects will necessarily themselves be conscious subjects, Andy Clark [Clark (2000)] and Robert Kirk [Kirk (2005)] take a slightly different tack by focusing on specific functional capacities which, they argue, imply the presence of phenomenal consciousness. Clark contends that if a system has the capacity to know, non-inferentially, that it sees the difference between, say, a red cup and a green cup, rather than hearing or feeling the difference, then this entails that there will be something it is like for the system. Likewise Kirk suggests that if changes in a system’s environment are forced upon the system in such a way that it is enabled to respond instantly and appropriately to those changes – to respond without having to act (e.g. guess or probe) to discover what has changed regardless of whether or not these changes are related to its current plans and goals – then there must be something it is like to be that system.

How does this strategy respond to our two target questions? Well, they all offer an intelligible and transparent answer to the Something It’s Like question. The Shoemaker/Tye approach attempts to show, in a suitably illuminating way, why it is inconceivable that the right kinds of functional processing should fail to be accompanied by phenomenal properties; the Clark/Kirk approach, to show why certain kinds of functional processing require their instantiation. Yet whatever the strength of these considerations, none of these stories offer any kind of answer whatsoever to the What It’s Like question. That asks why functional processing of a certain kind is accompanied by the particular phenomenal properties that it is. But Tye accepts that his argument “does not fully close the explanatory gap – in particular, it does not explain why, once a particular functional organization is in place, an experience is like that and not like anything else” [Tye (2006), p. 164] and Clark, when faced with the What It’s Like question, suggests “we must be humble. The argument … shows only (at best) that … it must look like something when, for example, we judge that one cup is red and the other green. Why then … does it look like this? Our story doesn’t say” [Clark (2000), p. 36].

But this concession leaves the pro-functionalist in a very strange position. To see why, consider the Kripkean metaphor about what God must do in order to create the world and consciousness. An anti-materialist would say that, once God has created all the physical/functional facts, he still has work to do to add consciousness to the world. The functionalist cannot accept this – if these arguments succeed, the functionalist must hold that in setting down
all the physical/functional facts God has thereby given the world phenomenal consciousness. But what of the specific kinds of phenomenal consciousness? Whatever answer the functionalist provides here will yield a decidedly odd restriction on God’s powers. If God is left with a choice as to what it is like for a subject to see a red cup, then as He cannot choose not to make it like something for the subject, God would therefore be compelled to make an additional choice about what kind of phenomenal consciousness to provide. But on the other hand, if, in fixing the physical/functional facts, God also thereby fixes the facts about what it is like, there would still seem to be a question of why He couldn’t have set things up differently – why couldn’t God have made what it is like to see green the same as what it is (now) like to see red? This is just to say that the functionalist has failed to answer the What It’s Like question. So even if the pro-functionalist arguments are correct, and phenomenal properties are identical with, or at least entailed by, certain kinds of functional property, it is no more easy to see how the reddishness and greenishness that need to be accounted for get a foothold. For these reasons, the hard problem remains unanswered and the explanatory gap remains unbridged.

III

It is at this point that a relationalist conception of phenomenal properties can offer us new insights into these issues. Just such a conception (albeit in the terminology of phenomenal character) is proposed by Campbell, who holds that:

the phenomenal character of your experience, as you look around the room, is constituted by the layout of the room itself: which particular objects are there, their intrinsic properties, such as color and shape, and how they are arranged in relation to one another and to you [Campbell (2002), p. 116].

Now of course, recalling the discussions of section one above, as we are stipulating that phenomenal properties are properties of experiences, Campbell’s account of phenomenal character cannot be accepted wholesale. Yet as was the case with representationalism, we can easily translate it into the terminology of phenomenal properties qua properties of experiences. The key feature of Campbell’s relationalist account lies in the idea that the subject of (veridical) experience is acquainted with mind-independent properties, etc., where “acquaintance” names an irreducible mental relation that the subject can only stand in to properties that are instantiated in the subject’s immediate environment. So for any given mind-independent property that would be a constituent of Campbell’s phenomenal character, the experience itself will have the property of acquainting the subject with that property. This ac-
quaintance property can therefore be identified with one of the experience’s phenomenal properties.

When it comes to the problems of consciousness, the advantage of a relational conception of phenomenal properties is that it enables us to answer the *Something It’s Like* and *What It’s Like* questions in turn rather than together. Take the *What It’s Like* question first. The key to the relationalist explanation of what it is like to have an experience turns on the claim that, on this picture, phenomenal properties are *relational* properties – relations between subjects and real-world instances of properties. This enables the relationalist to account for the phenomenal “greenishness” of a green experience by appeal to the claim that the (relevant) phenomenal property of a green experience involves the subject’s being acquainted with an actual instance of greenness. So the “what” it’s like for the subject is a matter of which mind-independent property the subject is acquainted with: the greenishness of a green experience just is the real-world instance of greenness that the subject is acquainted with.7

If the phenomenal greenishness of our experience is a matter of our being acquainted with an instance of greenness in the world, then an intelligible, transparent explanation of why phenomenal properties are entailed by functional properties would therefore require us to show how the right kinds of functional processing might suffice to acquaint us with worldly properties. This is where the kind of pro-functionalist stories we met in section two come into play. Instead of taking these considerations to show that, if the right kinds of functional processing are taking place, then the system must be in states with phenomenal properties and then wondering why those particular phenomenal properties, we can instead see these considerations as showing that, if the right kinds of functional processing are taking place, then the system will thereby be acquainted with aspects of its environment. So for a state of the subject’s to acquaint the subject with a property in its environment – which of course, on the relationalist account, is just to say: for that state to have a particular phenomenal property – the right kinds of functional processing must be taking place. But of course, *what* it is like to be in this state is not explained by the character of the functional processing itself, but rather by the mind-independent property that this functional processing acquaints the subject with. The functionalist component of the account needs only to explain what it *is* to be so related, not what it is *like* to be so related – the aspects of the world account for that. The reason that it is *like that* to see green is because it is real-world *greenness* that the system’s functional processing serves to acquaint it with – we no longer need to see the functionalist programme as attempting to conjure phenomenal greenishness out of function. This also explains why God had no more work to do once He had fixed all the physical and functional facts. In fixing these facts He both made it the case that certain creatures in the world would be acquainted with elements of
Relationalism and the Problems of Consciousness

their environment and fixed the nature of the properties that they are acquainted with. So this way of approaching the issues offers to provide just the kind of intelligible, transparent explanation Chalmers and Levine requested of why the truths about phenomenal properties obtain, given that the functional truths obtain. If we know that a subject’s functional states are doing the kind of integrated processing required to acquaint the subject with particular worldly properties, and we know what properties the subject is acquainted with, we thereby know what phenomenal properties the subject’s states have.

IV

I have presented this approach to the problems of consciousness as an advantage of a relationalist conception of phenomenal properties, but one might wonder whether the representationalist could motivate their position in an analogous way. Such a contention might proceed along the following lines. If acquaintance with the worldly property of greenness suffices for the phenomenal experience of green, as the relationalist suggests it does, then wouldn’t representing that a property of that kind is instantiated also suffice? So long as our experience tells us that we are presented with this worldly property, the thought would go, shouldn’t that explain the phenomenal nature of our experiences just as well as our actually being acquainted with it? And if the answer to these questions is yes, and a suitably transparent functional analysis of the representation relation (an explanation, in functional terms, of what it is for a state to represent a particular worldly property) can be provided – and the literature contains examples of just such analyses of the representation relation – then this motivation would look to be available to the representationalist just in case it is available to the relationalist.

This is an intriguing suggestion, but I suggest that an attempt by the representationalist to account for the phenomenal aspects of experience in this way will fail to adequately accommodate the intuitions that motivate the hard problem/explanatory gap in the first place. Yet the considerations I will raise here cannot be considered demonstrative. The first turns on the fact that many contemporary versions of representationalism incorporate a critical functional role element in distinguishing between states that do and do not possess phenomenal properties, and it is possible that a purer version of representationalism could be developed that did not share this feature. The second turns on the details of the particular analyses of the representation relation that have been appealed to by representationalists in elucidating what it is for a mental state to represent a worldly property. But once again, it is possible that an analysis of the representation relation could be developed that didn’t suffer from the difficulty I will raise. However, taken together I suggest that they do make a strong prima facie case that only a truly relation-
alist conception of phenomenal properties offers the kind of resolution to the problems of consciousness that has been outlined.

As just noted, the first concern stems from the extent to which current representationalist theories utilize a functional role criterion in distinguishing between states that possess phenomenal properties and those that do not. Uriah Kriegel highlights this in a discussion of Michael Tye’s particular brand of representationalism [Kriegel (2002)]. Kriegel points out that, on Tye’s PANIC view, what makes the difference between a state that has phenomenal properties and one that does not is not a matter of their representational contents, but rather a difference in their functional roles (Tye’s poise criterion). As Tye explains, to be phenomenally conscious, a particular content must stand “ready and available to make a direct impact on beliefs and/or desires... It follows that systems that altogether lack the capacity for beliefs and desires cannot undergo phenomenally conscious states” [Tye (1995), pp. 143-4]. This has the consequence that a particular representational content – the content that, when poised, corresponds with the experience of phenomenal greenness, say – could occur in the absence of any phenomenally conscious experience of greenness on the part of the subject. On such an account, therefore, simply representing the property of greenness does not suffice for the phenomenal experience of green. If the representationalist is to piggyback on the motivation outlined above for relationalism, some additional explanatory story would be required.

Of equal concern is the question of whether the representation relation, once given a functional analysis, will be strong enough to capture the fact that experience is, for want of a better word, presentational. As an example of this kind of worry, consider this passage from Barry Maund, again discussing Tye’s view:

To [feature in the representational] content [of a particular experience], a property must be causally related in the right kind of way to my experience, but given Tye’s account, to be aware of the property is simply for me to be in a certain state, which stands in a complex relation to instances of the property. It does not count as any normal kind of awareness [Maund (2002), §1.6].

The concern is that, even if representationalists do succeed in bringing the worldly property of greenness into the picture, the way in which they do so cannot adequately explain how it makes us “aware” of greenness as Maund thinks it is normally understood (which, from his discussion, is clearly a matter of what we have been calling phenomenal awareness). Developing this concern is difficult, because the details will differ according to which particular theory of content is yoked to the representationalist thesis. But to see where the problem lies, consider two prominent naturalistic analyses of the representation relation; the first holds that “content [should] be understood in
terms of causal covariation under optimal conditions” where for evolved creatures, “optimal conditions are ones in which the sensory mechanisms are discharging their biological functions” [Tye (1995), p. 153; see also Dretske (1995), p. 15]; the second turns on the idea that there is a lawlike relation between a particular mental state and a certain kind of property [Fodor (1990)]. Whichever of these options we consider – whether we hold that a mental state represents whatever property (or properties) it lawfully covaries with, or that a mental state represents a property if it was selected by evolution for covarying with that property, Maund’s point is that in neither case does this seem enough to account for why that experience should consciously present us with that property.10

To press this point, consider why we might think that, if a mental state is reliably caused by a property, say, then being in that state – whether or not a worldly instance of the property is there for the subject to see – would suffice to make it the case that the property is nonetheless presented to the subject. It seems to me that the only way in which we might think this would suffice would be if the subject’s having been in that state before had actually acquainted him with the property in question. If being in a state of that kind had actually acquainted the subject with greenness in the past, then maybe we could begin to understand how its representing greenness would suffice for the phenomenal aspects of such an experience – perhaps it could inherit its phenomenality from this past encounter. Mere representation could, on such a view, carry an echo of the kind of phenomenality that is grounded in acquaintance. But if acquaintance never gets into the picture in the first place, then we are left wondering how being in a state of a kind that has stood in certain causal relations with a property (none of which have ever involved acquaintance with that property), or being in a state that evolution has selected to covary with a property (again, without acquaintance having ever entered the picture), could serve to bring that property within the scope of one’s phenomenal consciousness in a way that will satisfy Maund and the proponents of the hard problem/explanatory gap. It seems that only a relationship like acquaintance – the kind of relationship that lies at the core of the relationalist theory of experience – offers to be able to adequately bridge this gap.

*Philosophy Programme*
*Massey University*
*Private Bag 11-222*
*Palmerston North, New Zealand*
*E-Mail: W.J.Fish@massey.ac.nz*
NOTES

1 This paper was presented to audiences at the ANU RSSS Philosophy Society, the University of London Institute of Philosophy, the Massachusetts Bay Philosop- cal Alliance and the University of Toronto Cloak and Dagger Philosophy of Perce- ption Reading Group. Thanks to all those present, including Alex Byrne, Dave Chalmers, Tim Crane, Benj Hellie, Mark Kalderon, Heather Logue, Susanna Siegel and Barry Smith.

2 I call the relevant theory of phenomenal properties “relationalism” in the pre- sent paper, but I use the two terms interchangeably. In [Fish (forthcoming)] I develop the thesis under the heading of “naïve realism”.

3 As I hope this shows, in holding that phenomenal properties are properties of experiences, we are not saying anything that the representationalist need oppose (pace [Tye (2002)]).

4 Although the quotes from Levine locate the explanatory gap between the physical facts and the phenomenal facts, I will focus on the gap between functional and phenomenal facts as I shall argue that a relationalist conception of phenomenal properties can serve to close this gap (a result which would, given that there is no gap between physical and functional, have the consequence of removing the appearance of a gap between physical and phenomenal facts).

5 For this reason, the type-A materialist is sometimes characterized as being an eliminativist about consciousness, but is more accurately seen to be an eliminativist about a particular conception of consciousness – a conception of consciousness as involving special phenomenal properties over and above the physical processing.

6 In the face of this criticism some materialists have attempted to accept that the explanatory gap has not been bridged, but to explain why the existence of an explanatory gap is nevertheless consistent with (and even predictable from) materialism. This strategy has an important role for special viewpoint-relative phenomenal concepts [e.g. Loar (1990); Perry (2001); Papineau (2002)]. Space precludes going further into these important discussions here, but let me be clear that this is not because I think phenomenal concepts are otiose – indeed, I think an adequate theory of phenomenal concepts will be a critical part of a materialist theory of consciousness, particularly when it comes to explaining what changes when Mary leaves the black-and-white room [Jackson (1982)]. However, I do think that relationalism offers an alternative way of thinking about consciousness that might make available the kind of resolution that could actually answer the hard problem and bridge the explanatory gap. Of course, at this stage, it is too early to suggest that relationalism provides a solution to these problems. For one thing, as it is presented here, relationalism is a thesis about visual consciousness and these problems are aimed at consciousness in all its forms. For another, it is the relationalist account of veridical experience that offers the new insights, so until accounts of the apparently non-relational visual states of hallucination and illusion have been presented, the responses to the explanatory gap/hard problem will seem to be unable to adequately account for all cases of visual experience. I develop detailed accounts of the latter cases in [Fish (forthcoming)], but extending this proposal to other forms of phenomenal consciousness is a topic for future re- search.
Shoemaker suggests that moves of this kind attempt to solve the “explanatory gap problem by kicking ... phenomenal [properties] downstairs, into the external world.” But, he suggests, this is just to trade a subjective explanatory gap for an objective explanatory gap: “How can color as we perceive it be a micro-physically realized property?” [Shoemaker (2003), p. 256]. This is true, of course, in that the gap between the “qualitative” nature of color and its “quantitative” base remains unbridged. But this does not thereby impugn this move. For one thing, as Shoemaker notes elsewhere [Shoemaker (2003), p. 254], the subjective explanatory gap may itself have been created by an attempt to solve the objective explanatory gap – the gap between the qualitative nature of the colors and their quantitative base – by “kicking upstairs into the mind” the qualitative nature of the colors! Moreover, as Johnston [Johnston (1997), pp. 580-3] argues, this problem is not specific to color. Instead, he suggests, we cannot derive the qualitative nature of properties from quantitative information in the majority of cases.

Thanks to Heather Logue for pressing me on this issue.

See also Lycan: “the mind has no special properties that are not exhausted by its representational properties, along with or in combination with the functional organization of its components” [Lycan (1996), p.11 my emphasis] and Dretske: “Experiences are those natural representations, that service the construction of representations, that can be calibrated (by learning) to more effectively service an organism’s needs and desires. They are the states whose functions it is to supply information to a cognitive system for calibration and use in the control and regulation of behavior” [Dretske (1995), p. 19 my emphasis].

[Thompson (forthcoming)] develops a similar objection on the grounds that an adequate account of the subjectivity of phenomenal experience – the redness of our experiences of red – requires “existent and actual properties”, which conflicts with features of the representationalist claim.