

knowability or in terms of the existence of a conclusive justification for the proposition. I take this fragmentation of sentential apriority and knowability and different notions of propositional apriority and knowability to be perhaps the most interesting upshot of the original puzzle.

In conclusion: if one accepts an orthodox semantics for ‘actually’ and an orthodox understanding of apriority, one must reject the orthodox view that  $p \leftrightarrow Ap$  is always a priori. Likewise, if one accepts the orthodox view that  $p \leftrightarrow Ap$  is always a priori, one must adopt an unorthodox semantics for ‘actually’ or an unorthodox understanding of apriority.<sup>10</sup>

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## *The higher order approach to consciousness is defunct*

NED BLOCK

The higher order approach to consciousness attempts to build a theory of consciousness from the insight that a conscious state is one that the subject is

conscious of. There is a well-known objection to the higher order approach, a version of which is fatal (Balog 2000b; Byrne 1997; Kriegel 2003; Levine 2001; Mandik 2009; Neander 1998; Rey 2000; Van Gulick 2000, 2004; Weisberg 2010). Proponents of the higher order approach have realized that the objection is significant. They have dealt with it via what David Rosenthal calls a ‘retreat’ (2005b: 179) but that retreat fails to solve the problem.

The fatal objection is short and simple, but some ground-clearing is required in order to state it. There are two quite different approaches to the nature of consciousness. One line of thought (that I have favoured) emphasizes the notoriously elusive ‘what it is like’ (Nagel 1974) to have an experience (Block 1978; Chalmers 1996; Levine 1983; McGinn 1989). Higher order theorists often use the phrase ‘what it is like’, supposing, controversially, that their theories are able to account for what-it-is-like-ness, and I will contest that claim, taking advantage of that common terminology.

The second approach is the one that emphasizes that a conscious state is a state one is conscious of. This perspective, which is the topic of this article, is supported by one strand of ordinary usage of the term ‘conscious’. As William Lycan (1996: 25) says ‘I cannot myself hear a natural sense of the phrase “conscious state” other than as meaning “state one is conscious of being in”’. Perhaps these two approaches are best understood as concerned with two different mental kinds that correspond to two different senses of the term ‘conscious’ (Block 1995; Lycan 2004a, 2008). Alternatively, perhaps they are best thought of as conflicting approaches to the same thing (Weisberg 2010). A third and I believe better alternative is that they are non-conflicting approaches that should be woven together into a single account that emphasizes both perspectives. (See the last paragraph of this article for an attempt in this direction.)

It is, however, a mistake to suppose that the approach that emphasizes what-it-is-like-ness insists on a characterization of the phenomenon of consciousness as non-relational, i.e. intrinsic in one sense of that term (Dennett 1988; Harman 1990; Weisberg 2010). That characterization derives almost entirely from *opponents* of the view and should be suspect on that ground alone. Many of the theorists who emphasize what-it-is-like-ness are also scientific realists, and all the major recent accounts of what consciousness is in the brain have been heavily relational (Block 2005b, 2007, 2009).

Higher order approaches divide into those on which the higher order state is perception-like (Armstrong 1968, 1978/1997; Lycan 1987, 1996, 2004b) and those on which the higher order state is a thought (Rosenthal 1986, 1997, 2005b; Weisberg 2010). The point I will make applies to both, and perhaps also to higher order ‘dispositional’ theories of consciousness (Carruthers 2000), but except in this sentence, I will be talking entirely about the non-dispositional versions. I will mainly be concerned with the

higher order thought (HOT) version of the view, with occasional mentions of the higher order perception view.

According to (non-dispositional) versions of the higher order approach, what it is for a mental item – a happening or state – to be conscious is for it to be the object of another mental item – *that has a particular causal origin*. This ‘particular causal origin’ is meant to exclude the HOT about your sensations that you infer from observing your own behaviour or from a brain scan. Sometimes the restriction on origin is spelled out as: not observational or inferential (Lycan forthcoming) or as not involving inference or observation that satisfies a certain access condition (Rosenthal 2005a), a fine point that I will ignore. Thus (collapsing observation into inference for simplicity) the two versions of the higher order approach agree on the following biconditional claim:

*The higher order theory:* A mental state is conscious if and only if the state is the object of a certain kind of representation arrived at non-inferentially.

The notion of ‘object of’ is sometimes cashed out in terms of mere accompaniment and sometimes in terms of representation. I shall tend towards the latter formulation. In the case of the HOT version, the representation is an assertoric<sup>1</sup> thought.

It should be noticed that when I have a conscious pain, the second order representation in virtue of which the pain is conscious (or perhaps the third-order representation in virtue of which the second-order representation is conscious) can be expected to be unconscious. Humans do not routinely achieve ever higher and higher orders of representation.

We now come to the most significant preliminary point, one that has not figured in previous formulations of the fatal objection: a higher order theory of consciousness can be held as an immodest (or ambitious) theory that purports to capture what-it-is-like-ness, or alternatively as a modest theory of *one kind* of consciousness, or of consciousness in *one sense of the term*, higher order consciousness. The modest version of the higher order approach recognizes another kind of consciousness (or consciousness in another sense of the term), what-it-is-like-ness or phenomenal consciousness.

The contrast between the modest and ambitious forms of the view can be illustrated with regard to the following question: why should it be that when

1 ‘Assertoric’ is introduced by Rosenthal in part to try to avoid refutation by the case of unconsciously feeling guilty about, e.g. unconsciously wanting to kill one’s father and marry one’s mother, an unconscious higher order state that is about another unconscious state (Rosenthal 2005b: 185). It also is an attempt to avoid a problem raised by Kati Balog (2000a). In one form, Balog’s point is that if the HOT makes for consciousness all by itself, one would not have to bother arranging pleasurable experiences or even imagining them since merely thinking one has them would be just as good. Assertoric thinking is supposedly not so ‘easy’ to do (Rosenthal 2000).

you put together an unconscious pain with an unconscious thought about it, you get a conscious pain? On the modest view, this question gets the not very substantive answer that that is what higher order consciousness amounts to, and this answer allows that even when it is not an object of any higher order state, an ‘unconscious’ pain might nonetheless be conscious in the what-it-is-like-ness sense of the term. The ambitious theorist, in contrast, needs a substantive response.

Is the modest version of higher order theory purely terminological? Not quite, since even if one regards it as an account of consciousness in the higher order sense of the word ‘conscious’, there are a number of alternative accounts of that sense of term – for example, the HOT and higher order perception accounts.

In a recent defence of the ambitious higher order perspective, Josh Weisberg (2010: 18) makes much of the claim that the folk ‘will not consider a state conscious if the subject is in no way aware of it’. But this observation can be explained by the *modest* thesis that the higher order sense of the term is easy to evoke in folk usage. I believe that it is an unnoticed oscillation between the relatively innocuous modest version and the controversial ambitious version that fuels the fire of the higher order approach.

Rosenthal has been clear in being an ambitious theorist and in the days before Karen Neander’s (1998) version of the objection that I will be elaborating here, Lycan sounded rather like an ambitious theorist. I quoted Lycan (1996: 26) on the verbal aspect of higher order approaches, but the point he is making in that passage is really that the verbal point cuts no philosophical ice. He says (26) ‘Although I cannot myself hear a natural sense of the phrase “conscious state” other than as meaning “state one is conscious of being in”, the philosophical use of “conscious” is by now well and truly up for grabs, and the best one can do is to be as clear as possible in one’s technical specification.’<sup>2</sup>

I believe that the main advantage of the higher order approach is a demystifying perspective on the change from a conscious experience of a pain to an unconscious experience of it (or the reverse change). I have the conscious pain, then I am distracted, and when the pain is not accompanied by any higher order state about it, it is unconscious. However, note that this account is as available to the modest version of the view as to the ambitious version.

The main competitor to the higher order account in its ambitious form (and, arguably in its modest form) has been the ‘same-order’ account, according to which conscious experience is reflexive in that it consists in part in an awareness of itself (Brentano 1874/1924; Burge 1997, 2006; Byrne 2004;

2 This attitude can be contrasted with Lycan’s (2001: 3–4), in which he gives an argument for a modest form of the view based on ordinary usage. Lycan tells me he was never an ambitious theorist.

Caston 2002; Kriegel 2005; Kriegel and Williford 2006; Levine 2001, 2006; Metzinger 2003; Ross 1961; Smith 1986). For the same-order account to explain the transition between conscious and unconscious states, it would have to supply an account of the difference between a pain having and lacking the self-referential property and why this self-referential property comes and goes with consciousness. I believe that this issue is of a piece with the famous ‘explanatory gap’ (Levine 1983), and that, as with the gap, no one has a glimmer of a clue of an idea of how to think about it. (But I don’t take this as a *disadvantage* of the same-order theory – the higher order account makes consciousness out to be less puzzling than it really is.)

The fatal problem stems from a radical misrepresentation case in which the item that the HOT represents, the ‘target’ in Rosenthal’s terminology, does not exist. Can this happen? There are a variety of neurological syndromes in which patients confabulate – what they do or experience is at variance with what they think they are doing or experiencing. A prominent example is anosognosia in which blind patients think they see or paralysed patients think they are moving the paralysed arm. In some cases, it appears that the patient is hallucinating, but in other cases the disorder genuinely seems to be a disorder of thought, a matter of ‘confabulation’ (Fotopoulou 2010).

Karen Neander (1998) introduced an example of triplets, each of whom has an assertoric thought expressible as ‘I have a sensation of green’. One has a sensation of green; another has a sensation of red; and in the empty higher order thought case, the triplet has no relevant sensation at all. Ambitious higher order theorists such as Rosenthal say that what-it-is-like-ness for all three triplets is exactly the same. As he puts it:

Suppose my higher-order awareness is of a state with property P, but the target isn’t P, but rather Q. . . . A higher-order awareness of a P state without any P state would be subjectively the same whether or not a Q state occurs. The first-order state can contribute nothing to phenomenology apart from the way we’re conscious of it. (2004: 32)

Or, as Rosenthal put it more recently:

If one has a sensation of red and a distinct HOT that one has a sensation of green, the sensation of red may nonetheless be detectable by various priming<sup>3</sup> effects. But what it will be like for one is that one has a

3 Unconscious exposure to a stimulus can facilitate later responses to the same or related stimuli. That is unconscious priming.

sensation of green. Similarly if one has that HOT with no relevant sensation at all. (2009b: 249) <sup>4</sup>

What is ambitious about ambitious higher order theories of consciousness is that a state of consciousness is a state of what-it-is-like-ness. However, the ambitious higher order account is committed to the converse as well. We can understand this converse link by considering sensory qualities such as what distinguishes the experience of red from green or pain from thirst. According to some theorists who emphasize what-it-is-like-ness (me for example), these sensory qualities have a kind of consciousness in themselves (namely, what-it-is-like-ness – what I call ‘phenomenal consciousness’). In contrast, higher order theorists think that those sensory qualities can exist without any kind of consciousness. And to preserve the significance of the higher order theory, they say that those unconscious qualities have *no what-it-is-like-ness* either. I say ‘preserve the significance’ because conscious pain and pleasure *matter* to us in a way that depends on what-it-is-like-ness; if the putatively unconscious pains had what-it-is-like-ness, it would be a mystery how they could be unconscious. Lacking consciousness requires lacking what-it-is-like-ness and so a state of what-it-is-like-ness is a state of consciousness. As Rosenthal (1997: 411) says ‘... what it’s like for one to have a pain, in the relevant sense of that idiom, is simply what it’s like for one to be conscious of having that pain’.

Here is the brief argument I have been building up to. I’ll put it in terms of the HOT theory, though I believe it applies equally to the higher order perception account. Suppose that at time *t*, I have an assertoric higher order thought to the effect that I am experiencing seeing something green, but in fact I am having no visual representation at *t*: the thought is ‘empty’. Let us suppose further that the higher order thought is not arrived at inferentially. Also, I have no other higher order thoughts at *t*. The theory supplies a necessary and sufficient condition for a conscious episode. An episode is conscious at *t* if and only if it is the object of an assertoric higher order thought at *t*, arrived at non-inferentially. The sufficient condition dictates that this thought at *t* is sufficient for a conscious episode at *t*. By the necessary condition, that conscious episode at *t* is the object of a simultaneous higher order

4 Indeed, Rosenthal thinks that we have evidence of such a determination of what it is like by a HOT independently from any first order state, in a ‘change blindness’ experiment by James Grimes (1996). As Rosenthal (2009a: 162) puts it: ‘In one case of change blindness, a large parrot switches back and forth between being red and green... even when the parrot’s color changes, there is often no change in what it’s like for subjects; Grimes’s subjects often continue seeming to see red when the parrot is green.’ No doubt someone else has endorsed such a view of ‘change blindness’, but I haven’t seen it. And for good reason: in standard ‘change blindness’ experiments, items can change colour 50 times before the subject notices a change, and it would be a mystery why the subject would settle on one interpretation rather than another to maintain throughout those colour changes.

thought. In the example, there is only one higher order thought at  $t$ , and we can assume it is not self-referential. So there is no conscious episode at  $t$  after all. *Thus, the sufficient condition and the necessary condition are incompatible in a situation in which there is only one non-self-referential higher order representation.*

The reason I keep repeating the ‘at  $t$ ’ is to emphasize that because there is an appropriate occurrent higher order thought at  $t$ , there must be an occurrence of consciousness at  $t$ . An occurrence of consciousness must be the object of a simultaneous occurrent thought, but there is only one thought. One could suppose that it is its own object, but that would make the theory a version of the same-order theory and would not be a defence of the higher order theory. That is the advertised incoherence.<sup>5</sup>

Weisberg (2010) says what is conscious is always an intentional object; however sometimes the intentional object exists and sometimes not. (If any non-philosophers have gotten this far, the intentional object of a mental state is what it is ‘about’. Ponce de Leon searched for the Fountain of Youth and so the (non-existent) Fountain of Youth is said to be an intentional object.) One could put Weisberg’s point by saying that there is no such thing as a HOT with no object because there is always an intentional object that is a conscious state, *though sometimes a non-existent one!* Rosenthal has taken this line though somewhat less explicitly. For example (2002: 415), ‘Conscious states are states we are conscious of ourselves as being in, whether or not we are actually in them.’ And (2005a: 209): ‘...HOTs determine what it’s like for one to be in various conscious qualitative states. So erroneous HOTs will in this case result in there being something it’s like for one to be in a state that one is not actually in.’

However – and this is where ambition comes into play – this line of thought does not avoid the argument I gave, because it ignores the fact that according to the *ambitious* form of the view, if a subject has a higher order thought of the right sort at  $t$ , then *there is something it is like for the subject at  $t$ , an episode or occurrence of what-it-is-like-ness at  $t$* . No doubt some defenders of the HOT theory will say that in the ‘empty’ cases, what-it-is-like-ness and consciousness are both instantiated only in intentionally nonexistent states. If they say this, they reveal that the what-it-is-like-ness they invoke is fake.

To see this, consider the triplets again, but this time let the HOT be the thought that one is in intense, agonizing pain. As before, each of the triplets has a different first-order ‘sensory’ state: one triplet has agonizing pain, another has the sensation of tasting chocolate and the third has no relevant first-order state at all. What it is like for all the triplets is exactly the same

5 I say ‘incoherent’ rather than ‘contradictory’ because the theory does not literally contain or entail sentences of the form  $p$  and of the form  $\sim p$ , but rather gives conflicting answers about one kind of case.

according to Rosenthal and Weisberg: ('A higher-order awareness of a *P* state without any *P* state would be subjectively the same . . .' (Rosenthal 2004: 132).) But how can it be that that the triplets all have states that matter in *exactly* the same way – in this case three states that are bad in themselves (or good in themselves) in the way that real agonizing pain is bad (or that intense pleasure is good)?<sup>6</sup> If what-it-is-like-ness is supposed to *matter* in the same way *whether it exists or not*, that just shows that 'what it is like' is being used in a misleading way. Of course, the higher order theorist could avoid phony ambition by moving to the modest view that the higher order description of the three triplets as having the same higher order consciousness is compatible with very different kinds of what-it-is-like-ness in the three cases.

Talk of intentional objects and intentional inexistents can serve some legitimate purposes, but such talk can be misleading. This is a case where it misleads.

It will be useful to distinguish between the aboriginal higher order thought view and the new version, produced in response to the empty HOT problem. The aboriginal higher order thought view explained each conscious happening in terms of a pair of *actual* occurrences, one said to 'accompany' or to be 'simultaneous' with the other. For example, Rosenthal (1997: 741) encapsulates the theory as follows: 'The core of the theory, then, is that a mental state is a conscious state when, and only when, it is accompanied by a suitable HOT.' (My computer counted 15 uses of variants of the term 'accompanied' in this article.) Accompaniment is a straightforward and non-mysterious relation between distinct happenings. Rosenthal (2005b: 179) continues to *introduce* the theory in terms of the attractive idea of an extrinsic relation, as in: 'The idea that a mental state's being conscious is an extrinsic, or relational, property of that state fits strikingly well with the way we actually talk about consciousness.' But he adds a footnote: 'There will be reason to retreat on the claim that a state's being conscious is strictly speaking relational . . .' And it is the version to which he has retreated, the non-extrinsic relational view that is the source of the trouble.

The aboriginal (extrinsic relational) higher order thought view says (for example) an actual pain is conscious if and only if it is the object of an actual appropriate higher order thought. Someone can hold this view without holding that an empty higher order thought all by itself makes anything conscious. Certainly, the modest higher order theorist can say 'The way we talk about consciousness dictates an answer to some questions about which states are conscious, but the presence or absence of consciousness in a case of a higher order thought with no object simply is not decided by the way we talk.' However, this is not a satisfactory response for a higher order

6 Those who take pain asymbolia (Grahek 2007) as showing that what it is like to have a pain is not bad in itself can substitute the experience of hurting or awfulness in the argument.



theorist who has metaphysical ambitions, especially of the persuasion that I have termed ‘ambitious’, since it exposes the fact that the modest theorist is not giving a metaphysical account of the nature of consciousness or what-it-is-like-ness. The aboriginal higher order thought view does not have the form of a claim about what consciousness (or what-it-is-like-ness) is, but rather about what the conditions are in which an actual state is a conscious state, leaving it open what to say about the ‘empty’ case. So there is intellectual pressure for the theorist with both kinds of ambition to move from the aboriginal theory to the new one by claiming that a higher order thought with no object can all by itself make for consciousness and what-it-is-like-ness.

I raised the issue earlier of how it can be that an unconscious pain combined with an unconscious thought about it can yield consciousness. The new ambitious view has an answer to this, albeit an implausible one, in terms of some kind of sufficiency: an appropriate higher order thought is somehow sufficient for consciousness (and what-it-is-like-ness) to occur. However, this ambition is self-destructive, since the new version of the higher order view has to say, as I just noted, that what-it-is-like-ness that is non-existent can matter just as much as what-it-is-like-ness that exists, and that amounts to abusing the notion of what-it-is-like-ness.

There is, however, a way out: to say that what-it-is-like-ness is a property of the HOT itself. That is, the HOT in a case of an empty HOT is the very state that is conscious and has what-it-is-like-ness. Neander’s triplets would now make sense: each is having the same HOT and so no wonder what-it-is-like for them is the same. However, it is not clear how this view can preserve the insight that a conscious state is a state one is conscious *of*. Perhaps the HOT is always self-reflexive – a state of consciousness of itself. But, as noted earlier, this would be a version of the rival ‘same-order’ theory.

It may be said that the higher order approach can do without what-it-is-like-ness altogether. But the point I have been making applies to consciousness too. If a theory of consciousness is worth anything, it must be about consciousness in a sense that matters to us in the way that conscious agony or ecstasy matters. If a state of being conscious of agony is supposed to matter equally whether it exists or not, the supposed theory of consciousness is worthless.

Thus, the higher order thought perspective faces a number of alternatives of which these are the most salient:

- (1) Adopt a modest view that prescind from real metaphysical questions about the nature of consciousness. My objection does not apply to this option – but see the paragraph below for an alternative.
- (2) Swallow the consequence that non-existent conscious agony can be just as bad as existing conscious agony, in which case the view is about consciousness in a merely technical sense of the term.

## (3) Move to a version of the same-order view.

At the outset I mentioned that the higher order approach assumes that the phenomenon that higher order theories of consciousness are trying to explain is that a conscious state is one that the subject is conscious of. I mentioned an alternative point of view that emphasizes the phenomenal aspect of experience, ‘what it is like’ to have a conscious experience. The two points of view can be usefully combined if we hold that *a reflexive conscious state is one that is phenomenally presented in a higher order representation of it* (Block 2005a). Since phenomenal presentation of a state requires that it exist, there is no ‘emptiness’ problem. Since this account uses a phenomenal state in a representation of it, there is no issue of mistaken representation. Further, the higher order theory (in its ambitious form) is ad hoc (Block 2009; Byrne 1997; Van Gulick 2004). If consciousness is a matter of a relation between a higher order representation and a first-order representation, why should it matter what the *causal origin* of that higher order representation is? So why is it OK to stipulate that it cannot have arisen through observation (e.g. if I observe my own angry behaviour and so come to think about my anger) or inference? If the higher order view in question is a modest theory based in how we use the word ‘conscious’, it would make sense to read conditions off usage, but if the theory is meant to – ambitiously – go deeper into metaphysical reality, the theory should be one for which no ad hoc conditions are required. And this test is passed by the theory that says that a reflexive conscious state is one that is phenomenally presented in a higher order representation of it. The origin of the phenomenal presentation does not matter. A similar point applies to the fact that in the higher order account it has to be stipulated that the higher order representation occurs at the same time (or at least overlaps in time) and in the same mind as the first-order representation it represents (Block 2005a, 2009; Van Gulick 2004). No such stipulations are required in the theory that a reflexive conscious state is one that is phenomenally presented in a higher order representation of it, since a state cannot be presented in a representation of it without a kind of temporal overlap, and the presentation relation requires the same mind. The advocate of naturalization and demystification will balk at the use of an unreduced notion of *phenomenal*, but the naturalistic credentials of the ambitious higher order perspective are themselves suspect given the upshot that conscious agony and ecstasy matter equally whether they exist or not.<sup>7</sup>

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## *Exaggerated reports: reply to Block*

DAVID ROSENTHAL

The report of my death is an exaggeration.  
(Mark Twain, *New York Journal*, 2 June 1897)

A state's being conscious is a matter of mental appearance – of how one's mental life appears to one. If somebody is in a mental state but doesn't seem subjectively to be in that state, the state is not conscious. This straightforward test for the consciousness of mental states is deeply entrenched in common sense and experimental work in psychology. Higher-order theories exploit this, arguing that a state is conscious only if one is subjectively aware of oneself as being in that state.

The higher-order-thought (HOT) theory explains that subjective awareness as due to one's having a thought that one is in the state. And to explain why