The Conscious Theory of Higher-Orderness*

Abstract:

The massive debate in philosophy and psychology and neuroscience about higher-order theories of consciousness has not adequately distinguished between the following two claims:

(Necessary Awareness): For any conscious mental state M and subject S, if S is in M, then S is aware of M.
(The Higher-Order Theory): For any conscious mental state M and subject S, if S is in M, then M is conscious because S is aware of M.

While I will assume that the first claim is true, I will argue that we should reject higher-order theories of consciousness. We should turn them on their head to go with the following theory:

(The Ascending Road): For any conscious mental state M and subject S, if S is in M, then S is aware of M because M is conscious.

Introduction

When you sit down on the park bench and realize to your dismay that the bench was wet, your feeling of wetness is a paradigmatically conscious mental state. What makes it a conscious mental state? According to higher-order theories of consciousness, we can explain why your mental state is conscious in terms of your awareness of the state. We can think of this as the Descending Road. This approach has a long history, with important and visible proponents both in philosophy and psychology.1

Higher-order theories are standardly opposed by first-order theories, views that explain why a mental state is conscious in terms of factors other than your awareness of the state.2 My aim in this paper is to oppose higher-order theories while sidestepping whether and how first-order theories might be true. My strategy is instead to turn higher-order theories of consciousness on their head.

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1 See e.g. Rosenthal 2005, Kriegel 2009, or Lau 2022, as well as Locke's Essay Concerning Human Understanding.

Here I will assume that, whenever we are in a conscious mental state, we are aware of it, or so to speak have *inner awareness* of it (Necessary Awareness). This does not mean that we can or should explain consciousness in terms of inner awareness. My proposal is instead that, once we accept Necessary Awareness, we should explain inner awareness in terms of consciousness. When you are in a conscious mental state, you are aware of it, but you are aware of it because it is conscious, not vice versa. Call this the Ascending Road. As important and attractive as this approach should be, it has been nearly invisible in the massive debate about consciousness and higher-order awareness. I’ll try to change that in this paper.

I’ll start by setting up the key questions and positions in more detail. I’ll then review the motivations for higher-order theories, and show how they either fail entirely or leave open whether we should take the Descending Road or the Ascending Road. The cases for higher-order theories tend to be merely correlational, leaving entirely open what might explain your awareness of a state that goes along with the conscious character of a state. And sometimes the putative considerations in favor of higher-order theories even turn out to support the Ascending Road better. When I’ve reviewed the case for higher-order theories, I will then survey some of the many further advantages of the Ascending Road over them.

When we accept Necessary Awareness, we should reject higher-order theories of consciousness in favor of the Ascending Road. The Ascending Road shifts our focus away from ambitiously reductive accounts of what consciousness is to questions about what consciousness does. But we can still get insight into what consciousness is. Part of what it is to be in a conscious mental state is to be in a state such that one is aware of it, and such that one is aware of it because of its conscious character. On the fuller picture we will develop in what is to come, conscious states are distinctive because it is of their nature to be the source of our awareness of them.

**Section 1. The Conclusion**

The first important distinction for us to understand and to trace out is between the following two kinds of claims:

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3 Shoemaker 1996 on self-intimation and pain may be an exception. See also section 4.2 of Chalmers 2003, Chalmers 2013: 345, section 6 of Nida-Rümelin 2017, and especially Stoljar forthcoming.
(Necessary Awareness): For any conscious mental state M and subject S, if S is in M, then S is aware of M. 

(The Higher-Order Theory/The Descending Road): For any conscious mental state M and subject S, if S is in M, then M is conscious because S is aware of M.

Necessary Awareness is only a correlational claim, holding that consciousness is sufficient for inner awareness, but leaving the explanation of this correlation entirely open, and indeed whether there even is an explanation of this correlation. While in principle one might treat the claim as a stipulative definition of consciousness (Lycan 2001), it is far better to treat it as substantive to have a productive debate about it (Rosenthal 2005). On the other hand, the Descending Road itself entails Necessary Awareness, and also demands more. The Descending Road takes a stand on the explanation of the correlation between consciousness and inner awareness, and specifically expresses the stance common to higher-order theories of consciousness. Inner awareness comes first in the story here, and is the key to why a given state is conscious. (Notice that even if one did treat Necessary Awareness as a stipulative definition of consciousness, there would still be plenty of room to have a substantive debate about the direction of explanation between consciousness and inner awareness.)

The Descending Road is widely travelled by philosophers and scientists, but it is by no means the only path available. Many first-order theorists reject it for all mental states (and then go on to endorse alternative accounts of what makes a given mental state conscious).

(The First-order Theory/Never The Descending Road): For any conscious mental state M and subject S, it’s not the case that, if S is in M, then M is conscious because S is aware of M.

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4 A more explicit but more cumbersome formulation might better proceed as follows: if S is in M, and M is conscious, then S is aware of M. That’s because in principle perhaps one and the same mental state could be conscious at one time or in one possible situation, yet not conscious at another time or other possible situation. In what follows I will mainly bracket questions about the individuation of mental states, and will flag when they do matter.
But here we need to proceed with care. Since Necessary Awareness does not entail that any higher-order theory of consciousness is correct, it is perfectly possible to reject higher-order theories without rejecting Necessary Awareness. Contrast the set up in the Stanford Encyclopedia of Philosophy that proceeds as follows:

The major divide amongst representational theories of phenomenal consciousness in general, is between accounts that are provided in purely first-order terms and those that implicate higher-order representations of one sort or another (Carruthers and Gennaro 2020, sect. 2).

This formulation obscures the terrain. Consider a theory of consciousness in purely first-order terms, for example one in terms of the distinctive kind of representational content of conscious mental states, or simply in terms of being in a certain kind of neural state. Even if those accounts do not explain consciousness in terms of higher-order representations, they could still implicate higher-order representations. Having such and such content, or being linked to such and such a neural state, might make it the case that a mental state is conscious, and also suffice for there to be higher-order representations of the mental state in the relevant subject. But the higher-order representation would not itself explain consciousness, it would instead itself just be along for the ride.

The omission is important. First-order theories have arguably been far too quick to deny Necessary Awareness. The live option remains for an explanatory chain in which some first-order factor X explains consciousness, and then explains inner awareness via consciousness explaining inner awareness:

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\text{Factor X} \rightarrow \text{M is conscious} \rightarrow \text{subject is aware of M}
\]

On the current set up, first-order theorists are not committed to denying Necessary Awareness, and some might even be committed to explaining Necessary Awareness.

For another example of a formulation of the issues that obscures the terrain, consider this quote from Rosenthal:
Higher-order theories all explain what it is for states to be conscious by appeal to an awareness of that state; because it is an awareness of another state, we can call it a higher-order awareness (HOA). No state of which one is not in any way aware is a conscious state. First-order theories, in contrast, deny that a state’s being conscious involves any such HOA (2012: 1424).

The first sentence supplies us a with a nice statement of higher-order theories of consciousness. As evidence that he seems to have their specific claims about explanatory priority in mind here, consider this remark later in that paper: “On higher-order theories, a state is conscious in virtue of one’s being aware of that state (2012: 1429)”. But the rest of our main embedded quote seems to conflate (1) the view that awareness of a state explains the state’s being conscious and (2) the weaker view that being aware of a state is a necessary condition for the state’s being conscious. When we reach the formulation of rival first-order theories of consciousness in the third sentence, we don’t have a formulation that simply denies that awareness of a state explains the state’s being conscious, which would in fact be the negation of the formulation of higher-order approaches in the first sentence. Instead, we have the stronger claim that conscious mental states can occur without awareness of them.5

We need a more fine-grained map.6

The gap between Necessary Awareness and higher-order theories of consciousness opens up the possibility of the following view:

(The Ascending Road): For any conscious mental state M and subject S, if S is in M, then S is aware of M because M is conscious.

The Ascending Road entails Necessary Awareness, but demands more, and in particular reverses the order of explanation proposed by higher-order theories of consciousness.

While the Ascending Road is less travelled, it has not been empty. Consider the Buddhist metaphor of consciousness as a lamp that illuminates itself.7 On one natural reading of this

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5 For a similar issue, see Janzen 2008: 70-71, where he moves freely between the claims that “a conscious state is always a state whose subject is, in some way, aware (or conscious) of being in it” and “a subject’s awareness of her mental state makes that state conscious”.

While I am mainly discussing formulations by higher-order theorists here, I would also emphasize that first-order theorists have also been too quick to leap from their view to the falsehood of Necessary Awareness, just as higher-order theorists have been too quick to leap from the putative truth of Necessary Awareness to their views.

6 While I won't pursue the issue here, our key distinctions might also raise complications for definitions of "neural correlates of consciousness" (Chalmers 2000, Lau 2022: ch. 2).
metaphor, it is in the nature of a light to illuminate itself, and in the nature of consciousness to be aware of itself. Here we can read the metaphor as expressing the view that consciousness explains inner awareness rather than vice versa. As far as contemporary analytic and psychological/neuroscientific views of consciousness go, however, I am not clear on whether any explicitly sign up for the Ascending Road.\textsuperscript{8}

I have set up the main claims in our discussion at a high level of abstraction, leaving open many further choice points. Here are some important further dimensions of variation, where most of them are surveyed in more detail in Farrell and McClelland 2017, Stoljar 2021, or Giustina 2022a.

As far as the \textbf{object} of awareness is concerned, I am simply taking it to be the mental state M itself. Alternative targets of awareness include for example oneself, or the fact that one is in a given mental state (further candidates are laid out in Nida-Rümelin 2017 and Stoljar 2021). It is perhaps even coherent to say that there is no object of awareness here, and instead only some form of “intransitive” awareness or other form of awareness without an object.\textsuperscript{9}

A further question concerns the \textbf{vehicle} of awareness. Perhaps the vehicle of awareness is M itself, so that we are concerned with reflexive inner awareness (Kriegel 2009a). Or perhaps the vehicle of awareness is instead some mental state not identical with M. Here I will entirely leave this issue open.

Another key issue concerns the \textbf{character} of inner awareness. One important question is whether the relevant form of awareness is itself conscious or not. Another is whether the relevant form of awareness can be reductively specified in terms of (somewhat) familiar notions such as those of attention, perception, thought, or knowledge, or whether the relevant form of awareness is sui generis, not reductively specifiable in terms of such notions (see Table 1 of Brown et al 2019 for more options). A still further question concerns whether the relevant form of awareness consists in actual awareness of a conscious mental state, or instead only a

\textsuperscript{7} For more on this metaphor and its uses, see Garfield 2006: 207-9 and especially Watson 2014. For more general treatments of consciousness and inner awareness in Buddhist philosophy, see Williams 1998, Yao 2005, Coseru 2012: ch. 8, Ganeri 2012: ch. 9, and Garfield 2014: ch. 5.

\textsuperscript{8} See note 3 for potential exceptions.

\textsuperscript{9} For discussion of the objectless option in a Sartrean and phenomenological vein, see Janzen 2008, sect. 6.2.2, Thompson 2010. See also Brown 2014 or Rosenthal 2018 on "nonrelational" versions of the higher-order approach.
disposition to be aware of a conscious mental state in such and such a way (e.g. Carruthers 2000). I will leave these questions wide open for the most part.

The final issue I will flag here concerns the explanatory role of awareness (for higher-order theories). One less demanding task would be only to explain why a given mental state is conscious, leaving open why it has the specific conscious character it has. To simplify our discussion, I will generally leave the matter here. But a more ambitious project would have inner awareness take on the burden of explaining why a given conscious mental state has the specific conscious character it has. Since the conscious character of a mental state potentially has further more specific aspects, there are multiple potential targets of explanation here e.g. pertaining to the representational content of a mental state or instead to the attitude or relation one bears to that content.

2. The Case for Higher-order Theories of Consciousness

An important line of motivation for higher-order theories of consciousness appeals to the sheer absurdity of being in a conscious mental state without being aware of it. The key idea, often expressed as the "Transitivity Principle", is put forth as being platitudinous in many places by David Rosenthal among others:

There is a natural way of understanding how conscious states differ from mental states that are not conscious. No mental state is conscious if the individual that is in that state is in no way aware of it. If somebody thinks, desires or feels something but is wholly unaware of doing so, then that thought, desire or feeling is not a conscious state (2012: 1425).

For more detail, see Farrell and McClelland 2017.

There are also questions about the kind of explanation offered, and whether it is causal or something stronger, or perhaps ultimately instead some form of metaphysical determination or grounding distinct from any explanatory relations.

For discussion of how relations of metaphysical determination or grounding might somehow back explanatory relations rather than simply being identical to them, see Koslicki 2012 or Dasgupta 2014.

For a nice range of references to Brentano, Sartre and others, as well as further arguments of his own for Necessary Awareness, see Janzen 2008 ch. 4.

An important further line of argument for Necessary Awareness comes out of the Buddhist philosopher Dignaga’s memory argument. See e.g. Ganeri 1999, Garfield 2006, Kellner 2010, Thompson 2010, Chadha 2017, Krieger 2019, Giustina 2022a (who also offers interesting discussion of how to potentially bridge the gap between Necessary Awareness and higher-order theories).

For further examples see Rosenthal 2005: 103, 109, 145.
Here I agree with Rosenthal and any others making this claim. The problem is that the point only gets us to Necessary Awareness. The "Transitivity Principle" does not entail any theory or combination of theories that would explain a state’s being conscious in terms of our awareness of it. The common move to higher-order theories from the putative platitude is an entirely optional leap.

Another important line of argument for higher-order theories is contrastive and often empirical in character. The first step is to look for examples of mental states of a kind such that some of the members are conscious and some are unconscious (we need not assume that any particular mental state that is conscious could have been unconscious, or vice versa). The next step is to argue that the conscious ones are such that we are aware of them, and the unconscious ones are not such that we are aware of them. The final move—not necessarily treated as a further step—is to conclude that some higher-order theory is true.

For a representative statement of the line of thought, consider again the Stanford Encyclopedia of Philosophy:

Almost everyone accepts now, for example …that beliefs and desires can be activated unconsciously…If we ask what makes the difference between a conscious and an unconscious mental state, one natural answer is that conscious states are states that we are aware of… these are states that are objects of some sort of higher-order representation (Carruthers and Gennaro 2020: sect. 2).

Just to be clear, the SEP entry is emphatically on the Descending Road, going well beyond merely discussing Necessary Awareness. In the opening of the entry, we have a robust statement of higher-order theories as follows:

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14 For dispute, see e.g. Dretske 1993, Thomassen 2006, Gertler 2012, Siewert 2013 or Stoljar 2021. For a line of response to some of their objections, see Giustina 2022b.
15 For some empirically rich versions of the line, see e.g. Lau and Rosenthal 2011, Lau and Brown 2019, Brown et al 2019, or Lau 2022. For empirical discussions on the side of first-order theories, see e.g. Lamme 2014 or Raccah et al 2021. A useful and broader further survey is Seth and Bayne 2022.
Higher-order cognitive theories maintain that phenomenal consciousness can be reductively explained in terms of representations (either experiences or thoughts) that are higher-order (Carruthers and Gennaro 2020: sect. 1).

And we also have the following robust claim as a commitment of higher-order thought theories in a different passage

what makes $M$ conscious is the existence of an unconscious HOT targeted on $M$
(Carruthers and Gennaro 2020: sect. 4)

Here again I would say we have made a leap. One way to bring out the issue is to distinguish two distinct explanatory tasks that can be in play when “we ask what makes the difference between a conscious and an unconscious mental state”. One question simply seeks a filter to permit us to sort mental states into the bucket of consciousness or to throw them back into the sea of unconsciousness. We can accomplish this task with a distinguishing feature of conscious mental states, one that is not shared with unconscious mental states. Here a version of Necessary Awareness can suffice when coupled with the claim that we are not aware of our non-conscious states, we do not need to go all the way to a higher-order theory. That said, the details of the version of Necessary Awareness will matter here. We are aware in some sense of some of our unconscious mental states—e.g. I always know that I always believe that Riga is in Latvia. Still, there presumably are more specific forms of awareness such that we have them for all of our conscious mental states, and not for any of our unconscious mental states. The proponent of higher-order theories is at any rate in no position to deny that. So it remains that we can fish out all and only the conscious mental states simply with a correlational claim rather any view about consciousness being explained by inner awareness.

A different way of asking “what makes the difference” looks more directly and ambitiously for an explanation of why any given conscious mental state is conscious, again assuming that conscious mental states are such that we are aware of them, and unconscious ones are not such that we are aware of them. As the SEP puts it here:

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16 There might also be some sense in which we are always aware of our actions (as for example per Rödl 2007), but it need not follow that all of our actions are conscious. Thanks here to Carlotta Pavese.
What is it about a conscious perception that renders it phenomenal, that a blindsight perceptual state would correspondingly lack? (Carruthers and Gennaro 2020: sect. 2).\textsuperscript{17}

Their assumption seems to be that our higher-order awareness of our conscious perceptions is the best or even only candidate standing to answer their question. But a correlation between consciousness and awareness does not suffice to supply an answer to their question. We still need more in favor of the distinctively higher-order conclusion that inner awareness explains consciousness. In particular, it remains entirely possible that whatever resources a first-order theorist offers to explain why a given mental state is conscious, will in turn thereby be able to provide an explanation also of why we have awareness of the given conscious mental state.

A closely related argument in the vicinity starts from the putative correlation between conscious mental states and awareness of them, and demands an explanation of that correlation. Here I suspect that many have simply assumed that higher-order theories provide the only candidate explanation of why all conscious mental states go along with awareness of them. But this move overlooks the possibility that all conscious mental states go along with awareness of them since consciousness explains inner awareness (or because some factor X explains consciousness where consciousness in turn explains awareness). As things stand, the Ascending Road is in an equally strong position to explain the correlation in question.

Before turning to potential positive advantages of the Ascending Road, I’ll briefly consider one further way one might try to justify higher-order theories. Here the idea is to try to use introspection to answer the question of whether the higher-order approach is correct.

The first problem is that introspection is not even a promising way to getting us to Necessay Awareness. Of course whenever we turn our introspective awareness towards our conscious mental states, we only find conscious mental states of which we are aware. Introspection is not going to light up any mental states that are conscious of which we are not aware at all. But this is a predictable artifact of our use of an introspective method rather than a trustworthy perspective on reality beyond (introspective) awareness (see Kriegel 2009b, 2012).

\textsuperscript{17} Or as Lau and Rosenthal put it, “how does awareness arise?”, and then go on to formulate variants of higher-order approaches along the following lines: “when a higher-order thought-like representation results in one’s being aware of a first-order representation (2011:366).”
Second, even if introspection somehow could get us to Necessary Awareness, the move beyond to higher-order theories is too far of a reach. It would take an extremely theoretically sophisticated and discriminating introspective capacity to detect the direction of explanation between the conscious status of a mental state and our inner awareness of that state. As far as I know no higher-order theorist ascribes such a rich capacity to introspection, it is hard enough for our non-introspective cognition to work with the distinction properly.

In sum, higher-order theories take the Descending Road, and tell us that our awareness of a conscious mental state explains why the mental state is conscious. But their cases for their view at best establish only the claim that conscious mental states are correlated with our awareness of them, and ignore the possibility that our awareness of our conscious mental states is instead explained by their conscious character.

3. The Case for the Ascending Road

3.1. Explaining the Correlation Between Consciousness and Inner Awareness

What is there to say in favor of the Ascending Road?

I will continue to assume that all conscious states indeed are such that we are aware of them. I will also assume that there is some explanation of why all conscious mental states are such that we are aware of them, and I will narrow our focus to a competition between the Ascending Road and higher-order theories as an explanation of the correlation. Our question is then about which of the two views provides a better explanation of the correlation.

To show that the Ascending Road provides a better explanation of the correlation between consciousness and awareness, I will map out how the Ascending Road easily avoids classic objections to higher-order theories (for representative exposition of such objections, with useful further references, see Carruthers and Gennaro 2020: sect. 7). Here we will also gain a better understanding of the commitments of the Ascending Road.

First consider the "rock" objection (Goldman 1993). Whether or not the rock objection is particularly strong, it is useful to start with since the irrelevance of the objection to the Ascending Road is vivid.
So there Dwayne Johnson is, knocked out stone cold after a stunt gone wrong on the set of *The Riverboat*. We are looking at him in full awareness of the Rock, but our awareness of him at this time is in no way capable of making the Rock conscious at this time. By the same token it might seem that our own awareness of any of our own mental states should not be able to make them conscious either.

The rock objection may or may not be fatal to higher-order theories, insofar as they can zero in a kind of awareness or object of awareness that does not admit of a parallel with the kind of awareness we have as spectators of the Rock. But there is a challenge here all the same for higher-order theories.

There is no challenge here for the Ascending Road. Given that the view ascends to higher-order representations from consciousness rather than descend to consciousness from higher-order representations, the view is not committed to any non-trivial sufficiency of higher-order representations for consciousness (I’ll give more detail about why in a moment). The view does not even threaten to make bad predictions about cases along the lines of the Rock. For the same sort of reason, Necessary Awareness is also not challenged by the Rock.\(^{18}\)

A second, arguably stronger line of objection insists that, since higher-order representations can misrepresent in various ways, we should not expect them to suffice for the presence of consciousness. For example, presumably we can have higher-order representations when no conscious state putatively targeted is present at all, a sort of hallucination of a conscious mental state (see e.g. Neander 1998 or Block 2011). Here we would have the presence of the appropriate form of higher-order representation that is supposed to suffice for the presence of a certain conscious mental state, in the absence of any such mental state. Presumably there can also be higher-order representations that misrepresent a mental state as conscious when it is not, or misrepresent the specific character of consciousness it has, a sort of illusion of a conscious

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\(^{18}\) There is a variant of the rock objection constructed around cases of awareness specifically of mental states. On this line of thought, it is conceivable for a creature to have all manner of relevant forms of awareness of its own mental states, without that awareness yet sufficing for those mental states to be conscious. Here we are to conceive of a counterpart of Dwayne Johnson as replete with inner awareness, while also being a so-called “zombie” with no consciousness at all. The conclusion is that higher-order awareness is the wrong sort of wand to conjure consciousness. (The line of objection need not proceed in terms of extreme cases of conceivability, but could instead try to use actual cases in which someone has important forms of awareness of a mental state that is still not conscious).

This line of objection is also inert against theories that take the Ascending Road. These theories never said that higher-order representations can conjure consciousness.
mental state. Taking attendance here to generate a potential counterexample, we arguably can mark the right sort of higher-order representation or awareness as present, and yet must mark the appropriate conscious mental state required as absent. Higher-order theories would then be false.

The challenge may or may not successfully block higher-order theories. Once we work in all the relevant qualifications about the character of the relevant higher-order representation or awareness, perhaps the opponent is not able to mark exactly the right kinds of higher-order resources as present while the conscious mental states remain absent. For example, perhaps the higher-order representations present need to be appropriately non-inferential, or perceptual, or non-conceptual. Perhaps once those specific kinds of representations are marked present, corresponding conscious mental states will be present as well.\(^\text{19}\)

If you take the Ascending Road, you do not face the objection at all. The direction of the Ascending Road is from conscious mental states to awareness or representations of them, not from higher-order awareness or representations to conscious states. So the view only makes predictions about cases in which a conscious mental state is already present. To challenge the Ascending Road with counterexamples, you need to start with cases where we do mark conscious mental states as present. And there's no logical room on any view for a case in which a conscious mental state is present, and yet misrepresented as being present. (For the same sort of reason, Necessary Awareness is also not challenged here either).

We can clarify the advantage of the Ascending Road via a parallel with the distinction between self-intimation and infallibility in debates about self-knowledge (Shoemaker 1996). Self-Intimation is the claim that, if you are in a mental state M, then you believe that you are in M. Infallibility is the claim that, if you believe that you are in a mental state M, then you are in M. Self-Intimation ascends, Infallibility descends. As many have noted in the context of debates about self-knowledge, Self-Intimation does not imply Infallibility. There is plenty of logical room for the possibility that, even though being in M suffices for believing you are in M, believing that you are in M does not conversely suffice for being in M.

The Ascending Road parallels the structure of Self-Intimation, higher-order theories parallel the structure of Infallibility. Given that the Ascending Road does not work downwards from higher-order representations to conscious mental states, it can allow all manner of

\(^{19}\) A more intricate line of response can be found in Brown 2014 or Rosenthal 2018.
misrepresenting higher-order representations in the absence of corresponding conscious mental states.

We can be more explicit about the commitments of the Ascending Road. The only accuracy guaranteed by the formulation of the Ascending Road is the following: if you have a higher-order representation that you are in M because you are in M, then you are in M. But everyone should agree about that. The Ascending Road also allows that, if you have a higher-order representation that is a case of true belief or knowledge that you are in M, then you are in M. But everybody should allow for that. These are all cases in which it is trivial that some form of higher-order representation is accurate.

I’ll make just one more point about the commitments of the Ascending Road. Some higher-order theories narrow down to a form of higher-order representation that is a better candidate to suffice for consciousness, say non-inferential perceptual representation that you are in M. Some versions of the Ascending Road might also work with that form of representation too, holding that when you are in a conscious mental M, you have a non-inferential perceptual representation that you are in M because you are in M. You might think that at least these versions of the Ascending Road will have to say that this privileged form of higher-order representation suffices for consciousness. But they don’t. They do prohibit any scenario in which both (1) someone has a non-inferential perceptual representation that she is in M because she is in M, and (2) she is not in M. But they can still allow for a hallucinatory form of non-inferential perceptual representation that you are in M, when you are not in M. These would simply have to be cases where you do not have the higher-order representation because you are in M.

All versions of the Ascending Road require that conscious mental states suffice for some form of awareness or representation of them. Nothing in the formulation of the Ascending Road requires that the relevant form of awareness or representation can be present only because of consciousness. Going back to the Buddhist metaphor, even if consciousness is a lamp that lights itself, that leaves open the possibility that light of an equal color and brightness could sometimes come from a source other than the lamp.

Finally, consider the important objection that higher-order theories generate a vicious regress (for more discussion see e.g. Janzen 2008, Siewart 2013 or Stoljar 2018). Here I take the objection to be generated by the specific assumption that, if you are aware of a mental state M
without being consciously aware of that mental state, then your higher-order awareness won’t be capable of making M conscious. However, if your higher-order awareness of M (AM) must itself be conscious to make M conscious, we will now need a distinct instance of awareness of your awareness of M (AAM) to make AM conscious. And so on.

Now, the higher-order theorist can debate whether higher-order awareness must be conscious to do its thing, or even whether the regress in question is vicious. Indeed, the higher-order theorist must debate such points to defend the theory. Since the proponent of the Ascending Road never said that higher-order awareness ever makes a mental state conscious (or that conscious mental states make us have specifically conscious awareness of them), the proponent of the Ascending Road can sit out this debate.

Many of the most important objections specifically targeted against higher-order theories do not even arise for the Ascending Road. I do not see how analogues of them arise either. Now, we do so far lack a full account of exactly how a conscious mental state might make us aware of it. We have formulated the Ascending Road at a fully general level, leaving open whether the connection between consciousness and inner awareness is through causation, or constitution, or some further option. But this silence of the general formulation of the view gives us no reason to suspect that conscious mental states cannot make us aware of them—there is no promise at all to the view that conscious states are incapable of making us aware of them. While there is to some extent a mystery about how inner awareness of a mental state could generate consciousness, giving us at least some reason to suspect that higher-order theories are mistaken, there is no comparable mystery about how a conscious mental state could generate awareness of it.

At the same time, the Ascending Road is not simply orthogonal to higher-order theories of consciousness. It is not that one approach is a theory of inner awareness, and the other a theory of consciousness. Instead, both approaches promise an explanation of the correlation between consciousness and inner awareness, and conflict in their reverse orders of explanation of the correlation. Insofar as philosophers are sympathetic to Necessary Awareness, and seek an

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20 A further objection is set out in Dretske 1995: 116-122, according to which higher-order theories imply that consciousness is epiphenomenal, assuming that our being aware of a mental state does not change its causal profile. As far as I can tell the Ascending Road dodges this objection as well. Causal versions of the view will even require that conscious mental states be causally efficacious in generating our awareness of them.
explanation of it, the more minimal commitments and lighter explanatory burden of the Ascending Road should make them prefer the Ascending Road to higher-order theories. Assuming that Necessary Awareness is true, the Ascending Road is more likely to be true given its weaker demands and simpler open explanatory questions.

3.2 Objections and Replies

One might protest that, even if higher-order theories face more objections than the Ascending Road, this disadvantage is cancelled out by their advantage of providing us with a richer theoretical picture of consciousness. Here we can go back to the idea that higher-order theories answer the question of “what makes the difference between a conscious and an unconscious mental state” (Carruthers and Gennaro 2020: sect. 2). In particular, higher-order theories offer an account of what it is for a mental state to be conscious, in terms that do not themselves employ any concept of consciousness. As Alex Byrne puts it when setting up the target of his critical paper:

there is another interpretation [i.e. the higher-order theory] which holds out the promise of a reductive analysis of consciousness: an account that gives necessary and sufficient conditions for a mental state to be conscious in terms that do not presuppose or employ the notion of consciousness (1997: 103-104).

In contrast, I have emphasized that the Ascending Road does not make predictions about how any higher-order representation generate, constitute or otherwise explain consciousness. Perhaps this reticence of the Ascending Road undermines its overall theoretical profile.

My response is that, on at least one reading of the question, “what is it for a mental state to be conscious”, the Ascending Road itself can be supplemented so as to answer that question better. The point is that, at least on one understanding of the primary ambition of higher-order theories, that ambition can be attained more economically by the Ascending Road.

The Ascending Road can smoothly supplemented as follows so as to tell us what a conscious mental state is:
(Ascending Road PLUS): For any mental state M, M is conscious if and only if M is such that, if you are in M, then you are aware of M because you are in M.

The Ascending Road on its own holds that all conscious mental states make us have inner awareness of them, thereby leaving open the possibility that all non-conscious mental states also make us have inner awareness of them. Our supplement closes off this possibility with the further claim that only conscious mental states are such that being in them suffices to make us have inner awareness of them. Here we have a feature of all and only conscious mental states, formulated without the use of any term or concept for consciousness. On at least one minimal reading of “reductive analysis”, the one active in the quote above from Byrne, we now have a “reductive analysis” of consciousness. But we do not have to put the point in such terms, we can also put the point simply in terms of non-circular necessary and sufficient conditions for consciousness. (Here we repurpose the earlier point that the Ascending Road can offer an account of “what makes the difference” between conscious and unconscious mental states).

The Ascending Road can be extended to offer an account of what consciousness is without taking on many further commitments and burdens of higher-order theories. In particular, we still avoid the claim that any form of awareness non-trivially suffices for consciousness. The key defining feature of a conscious mental state here is not quite the feature of our being aware of the state. The key feature of a conscious mental state here is instead the feature of being such that, if you are in the mental state, then you are aware of it because you are in it. And it is again trivial that you are aware of a state you are in because you are in it.

One might object that the proposed benefit of the supplemented Ascending Road is better described as that of providing a "mark of the conscious mental", as opposed to any genuine reductive analysis deserving of the time. In order to have a proper reductive analysis of consciousness, we arguably need to go beyond necessary and sufficient conditions to something that underlies and determines the presence of consciousness (specified without using the notion of consciousness), as opposed to something above consciousness determined by consciousness.

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21 Compare Rosenthal 2005: 27-9. Here we are likely to disagree about whether being conscious is a contingent feature of a mental state. According to the Ascending Road PLUS, any mental state that is conscious could not have failed to be conscious.

22 Thanks here to Uriah Kriegel.
In other words, a proper reduction would arguably provide a maker of consciousness rather than a mark of consciousness.

In response, I would first emphasize that it's unclear whether higher-order theorists were firmly committed to identifying anything more than a mark of the conscious mental. Consider for instance the following fairly relaxed demand from Rosenthal of theories of consciousness:

However, whatever other explanations a theory of consciousness may provide, it must at a minimum tell us how mental states that are conscious differ from those that are not (2012: 1424).

By adding a thesis about what all and only conscious mental states do, the Ascending Road did tell us how mental states that are conscious differ from those that are not. So whether or not the proposal deserves the name "reductive" or not, the Ascending Road can meet the particular bar proposed here by Rosenthal.

Here we face a fork in the Ascending Road. One option is for the Ascending Road to reject robustly reductive approaches to consciousness. There is after all a fair question of what a genuine reduction exactly is, as well as about whether any such reduction is desirable or attainable. On this fork, we could pursue a path analogous to the knowledge-first program of Williamson 2000. Williamson's project is broadly to use knowledge as an explanatory tool, rather than to try to explain knowledge in any robustly reductive way (see also Unger 1974). One might likewise set out to explain inner awareness and other conditions in terms of consciousness, rather than explain consciousness in terms of inner awareness or other conditions.

That said, the Ascending Road can instead be combined with more ambitiously reductive approaches to consciousness. On this path, one endorses some first-order account of how consciousness is determined, and then traces a chain of explanation/determination from the first-order resource, to a conscious mental state, to inner awareness of the mental state. The chain again would look like this:

Factor X $\rightarrow$ M is conscious $\rightarrow$ subject is aware of M

Here we could think of inner awareness of consciousness as being ultimately determined by whatever resource the first-order account privileged. Here inner awareness is a mark of consciousness stemming from an underlying maker, in other words, a maker's mark.
In sum, even if higher-order theories offer the ostensible advantage of non-circular necessary and sufficient conditions for consciousness, that advantage is also offered by the supplemented Ascending Road, while still also avoiding the host of classic objections to higher-order theories. If the advantage of higher-order theories is supposed to be some more robustly reductive account of consciousness, even that advantage can be matched by coupling the Ascending Road to a first-order theory, again while avoiding the host of classic objections to higher-order theories.

At this point, you might wonder whether there even are any objections to higher-order theories that do also bear on the Ascending Road. Indeed there are, at least insofar as they bear on the Necessary Awareness thesis entailed by them both.

A key challenge here would hold there isn't even a correlation between consciousness and awareness to explain. This sort of traditional objection to higher-order theories is not targeted specifically at the explanatory ambition and direction of that ambition of higher-order theories (even though in practice it seems to be pushed without distinguishing between Necessary Awareness and the further specifics of higher-order theories).

One variant of the challenge proceeds in terms of limits on our introspective self-knowledge. Given plausible limits on our self-knowledge, perhaps there are many cases when we are in a conscious mental state without being aware of it. While I agree that there are dramatic limits on our self-knowledge, it is straightforward to deny that this is relevant to the assessment of Necessary Awareness (see also e.g. Rosenthal 2005: ch. 4). No one ever said that being aware of a mental state is any form of knowledge of it. The relevant form of awareness in Necessary Awareness can coexist with ignorance of our conscious mental states.23

A more promising variant is the over-intellectualization objection pushed by Dretske 1995 and many others. This challenge uses putative cases of animals or human infants who arguably have conscious mental states without (yet) the equipment to have awareness of any of those mental states. (Here we are concerned with blindness to conscious mental states, not with hallucinations or illusions about them).

In response, we can remind the objector that, in order to over-intellectualize, you need to intellectualize in the first place. Since the relevant form of awareness of conscious mental states can come in perceptual, attentional, or sui generis forms, it’s not at all clear why a capacity for

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23 For further relevant discussion of introspection, see Smithies 2019: ch. 5.
inner awareness shouldn’t be widely available across the animal kingdom, at least for any creature complicated enough to have consciousness in the first place. (A separate line of response could instead work with a more cognitively demanding form of awareness, just in a dispositional rather than non-dispositional form. I will continue to set that option aside).

It would be nice to have a more direct motivation for the Ascending Road. My suggestion is that we have had it all along.

Here I ask you to revisit the idea that there is something absurd about a case in which someone is in a conscious mental state without being aware of it. Assuming that you share this sense with Rosenthal and so many others, my contention is that this sense goes beyond the correlational claim that we have awareness of each of our conscious mental states. I instead suggest that many of us have a sense that this scenario is impossible because conscious mental states make us aware of them. Here we can return to the Buddhist metaphor of consciousness as a lamp that lights itself. The idea is not just that conscious mental states are lit up somehow, but rather that they light up themselves due to their conscious nature.

There is indeed something absurd about a case of a mental state’s being conscious without our being aware of it. When you scratch deeper at why such a case seems absurd, I hope you reach the more explanatorily satisfying sense that such a case is impossible because conscious mental states make us aware of them.

Ideally we would have further direct considerations in favor of the Ascending Road. In the meantime, at least those who already accepted Necessary Awareness should sign up, and those who already accepted higher-order theories should switch over.

**Conclusion**

The distinction between the Ascending Road and higher-order theories is subtle and under-explored. Most professed higher-order theorists, not to mention first-order theorists, have overlooked it entirely in their explicit formulations and motivations for their views. For all that, I suspect that many ostensible higher-order theorists have been on the Ascending Road all along, especially given the point that the Ascending Road offers at least one form of an account of what consciousness is.
Perhaps many higher-order theorists were innerly confident that it is of the nature of a conscious state to make us aware of it, just unaware that that was their thought.

References


Lamm, Victor. 2014. "The crack of dawn: perceptual functions and neural mechanisms that mark the transition from unconscious processing to conscious vision." Open MIND. Frankfurt am Main: MIND Group.


