

# Phenomenal Consciousness and Conscious Access

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## OVERVIEW

- I. Block's Overflow Argument**
- II. The Cognitive Bottleneck**
- III. Is Phenomenal  
Consciousness Conscious?**
- IV. Inferring to the Best  
Explanation**

## I. Block's Overflow Argument

- There are many experimental paradigms in which subjects evidently sense things—but report not sensing those things and are aware of themselves as not doing so.
- Such subliminal perception can occur in normal subjects, e.g., in experimental situations in which the stimulus is masked or degraded. Nonconscious perceiving also occurs in subjects with neurological damage—blindsight, extinction, neglect, etc.

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- Evidence that subjects sense stimuli they deny sensing comes from "forced-choice" guessing that's way above chance, as well as from (other) priming effects on subjects' psychological processing.
- An everyday case: One may look straight at somebody who's been staring at one. One must have seen the person staring—how else?—but seen it so peripherally that one was not at all aware of the seeing.
- The standard explanation of these cases—both everyday and experimental—is that there is sensing, and hence a sensation, but that the sensation is not conscious.

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- We can summarize this way of thinking about such cases by what I've called the Transitivity Principle (TP):

If one is in some mental state but *not aware* of being in that state, that state is *not conscious*.

- In all these cases we have *independent evidence that the individual is in the state in question*—has the relevant sensation.
- But we have, in addition, *compelling evidence that the individual is wholly unaware of being in that state*—because the individual tells us so, and cannot report being in the state.

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- Indeed, it seems that we have *nothing else to go on in drawing a distinction between those mental states that are conscious and those that are not*.

Since lack of awareness of a state shows that the state isn't conscious, a state's being conscious consists one's being aware it—in some suitable way.

- Block acknowledges that a state of which is wholly unaware does not intuitively count as a conscious state (2007a, b).
- But he denies that this awareness is tied to the ability to report, which he believes reflects *an independent type of access*.

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- The cognitive system that enables one to report one's mental states, Block argues, is subject to a bottleneck that limits how much one can report.
- But phenomenal consciousness, he urges, operates from a different system, and so overflows the bottleneck that constrains cognitive access, and hence reportability.
- If all this is so, we can't rely on subjects' reports to determine the presence of phenomenally conscious states, since phenomenal consciousness can occur even when one is unable to report its presence.

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- I'll urge several difficulties with Block's argument. For one thing, (1) I'm not convinced that the bottleneck Block appeals to functions in the way he urges.
- That aside, (2) I'm not convinced that the phenomenal consciousness that he argues is present in the absence of reportability is actually conscious in any intuitive way.
- Finally, (3) Block urges that he's given the best explanation of most of the data, but I'll urge that another way of explaining the data is at least as good, and conforms better to our pretheoretic intuitions.
- The next 3 sections take up these 3 points.

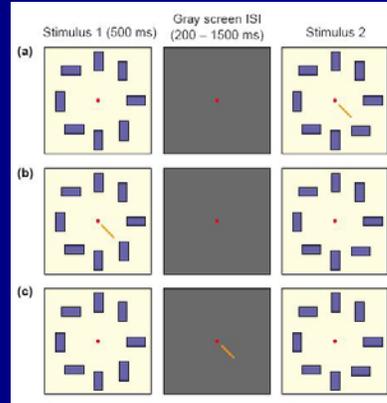
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## II. The Cognitive Bottleneck

- Consider the change-detection experiment Block (2007, 2008) discusses by Landman, Spekreijse, and Lamme (2003).
- When cued with the 2<sup>nd</sup> stimulus subjects correctly detect for roughly 4 rectangles whether orientation has changed, but for almost all when cued at the outset, and—crucially—during the intervening interval.



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- When cuing occurs at the end, subjects must rely on working memory. So the limit of roughly 4 in that case likely reflects the well-established limit of about 4 items for working memory, and subjects can report the orientation of only 4 items.
- It's the match between cuing at the outset and in the intervening interval that needs explaining.
- Block urges that in this experiment "subjects are continuing to maintain a visual representation of the whole array and reading their answers off of it—as subjects say they are doing" (2008, 304).

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- Subjects do report that they maintain such a representation. But they *also* say that "they can see all or almost all eight items in the Landman experiment" (2008, 306).
- Block takes all this to show that the capacity of phenomenal consciousness is greater than that of "the working memory buffer that governs reporting" (306).  
Subjects have phenomenally conscious sensations of all the rectangles, but when working memory is needed, they can report on the orientation of only about 4.
- Phenomenal consciousness thus *overflows* cognitive access.

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- Because subjects do report seeing all the rectangles, but can't in the end-cuing case report all the orientations, *the bottleneck affects orientations, but not the occurrence of rectangles themselves.*
- So Block distinguishes (2007, 2008) between the *generic* and *specific* contents of phenomenal consciousness.  
The generic content here is rectangles' occurring in particular locations, whereas the specific content concerns only *the orientation of their lengthwise axis.*
- This has implications about whether cognitive access overflows phenomenology.

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- Phenomenology does overflow cognitive access, but only access to certain specific properties—in this case spatial orientation.
- Subjects lack complete information about some of the sensations that figure in their perceiving the rectangles. But there are no phenomenally conscious states to which subjects altogether lack cognitive access.
- That's not all that surprising. It's likely that we rarely have complete cognitive access to the qualitative properties of many—if indeed any—of our phenomenally conscious states.

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- Block's aim was to show that there are phenomenally conscious states that subjects can't report. But the Landman results don't show that.
- We can best describe those results as showing that subjects have cognitive access to all their phenomenally conscious states—but only in respect of some of their phenomenal features, and not all.
- The relevant states are phenomenally conscious in respect of some features, but not in respect of others. Phenomenal consciousness doesn't overflow reportability, but coincides with it.

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### III. Is Phenomenal Consciousness Conscious?

- The Landman findings do not show us that there are phenomenally conscious states that subjects can't report, but rather that subjects cannot report all the mental features of their phenomenally conscious states.
- The correct moral to draw, I've argued, is that such states are phenomenally conscious, but only in respect of features that subjects can report.

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- Specific linguistic impairments might, of course, prevent subjects from reporting states that they're aware of. But it's a general cognitive bottleneck, not special deficits, that's at issue here.
- Absent such impairment, reportability reflects TP, on which a state's being conscious consists in one's being aware of that state in some suitable way.
- And any state can be conscious in some respects and not others: A sensation of red, e.g., can be conscious in respect of its mental quality of red, and yet not in respect of the exact shade of red.

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- Can a state be phenomenally conscious without one's being aware of it at all?  
TP says some such awareness is needed for any state to be conscious—at all.
- As I mentioned earlier, Block accepts this principle. But he endorses an intrinsicist version, on which the awareness that TP posits is intrinsic to each phenomenally conscious state (e.g., Caston 2003).
- He's also congenial to a deflationary version, on which TP reflects just the triviality that we experience our experiences, as we smile our smiles (Sosa 2003; Block forthcoming).

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- The deflationary reading implies that all qualitative states are conscious: We presumably experience all our experiences. And the intrinsicist reading rests on a non-question-begging way to individuate states—which is at best hard to come by.
- But these readings are not the only options.
- We can also explain the available data by supposing that reports express distinct thoughts about the states we report—thoughts that aren't themselves usually conscious, but that implement the awareness TP posits of conscious states—including phenomenally conscious states.

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- How might we adjudicate between these competing hypotheses—trivial or intrinsic awareness of phenomenally conscious states versus independent awareness by way of higher-order thoughts (HOTs)?
- Sosa's deflationary idea sounds good for experiences, since 'experience' likely does imply awareness of the relevant state. But 'perception' carries no such implication and 'sensation' only sometimes.  
And the intrinsicalist view itself implies the very reportability Block wants to avoid.
- And HOTs explain both the reportability and awareness of our conscious states.

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- On an intrinsicalist construal of TP, such as Caston's, the awareness posited by TP is built into each conscious state itself.
- But even if the awareness is intrinsic to the state, that awareness is a higher-order awareness: It's an individual's being aware of being in the relevant state.  
So intrinsicalism *does not sustain, as Block suggests, a first-order view.*
- Block urges that if the awareness is intrinsic, it's just some reflexive property of the state. But it's unclear what that could be—apart from the individual's being aware of being in the state.

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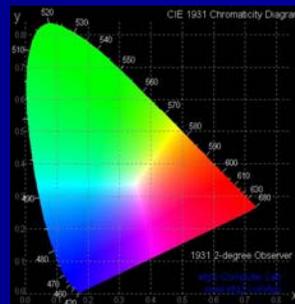
- Some would hold that mental qualities must occur consciously, arguing that we know about mental qualities only from first-person access.
- But Block and I agree that there are qualitative states that one “does not and cannot know about” (2008, 292). So that’s not a reason to insist that all qualitative states are in some way conscious.
- So there’s little going for the deflationary or intrinsicist reading of TP, and we can conclude that we are in some substantive way aware of every conscious state—even phenomenally conscious states.

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- Block appeals to brain function to learn about mental qualities, where I appeal to psychological function, arguing that we can individuate mental qualities independently of their being conscious by their location in a suitable quality space.
- The mental quality of red has a position in the space of mental color qualities parallel to that of the red of physical objects in the space of physical colors, which we can test by forced-choice matching in nonconscious cases.



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- Block holds that a qualitative state's being conscious consists not in any higher-order awareness of the state, but in some neural activation that converts the state from not being conscious to being conscious.
- So he urges that whatever higher-order awareness does occur is a byproduct of the state's being conscious, and not what its consciousness consists in:  
What consciousness "does," not what it "is."
- But he offers no good argument *against* TP, and it's at least as likely that increased neural activation results in a state's being conscious because it results in a HOT.

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## IV. Inferring to the Best Explanation

- Countenancing qualitative states that are conscious in respect of some but not all of their mental qualities lets us explain the Landman results: Subjects have conscious sensations of all the rectangles, though the sensations aren't always conscious in respect of lengthwise orientation.
- There are other explanatory advantages to hypothesizing states that are conscious in respect only of some of their mental qualities.

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- Some hold that failure to detect changes in (*some*) change-blindness experiments is due to our actually having no phenomenal consciousness of the changes (e.g., Noë).
- Countenancing qualitative states that are conscious in respect of some but not all of their mental qualities helps with that:  
*Relevant perceptual states are conscious in respect of some mental qualities, but not those qualities that pertain to the undetected change.*
- The states have rich qualitative character, but they're conscious in ways that fail to fully reflect that richness.

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- That's clear in change-blindness findings by Grimes (1996), in which changes occur during saccades, when retinal stimulation doesn't reach visual cortex.  
But post-saccade stimuli do affect visual cortex even when subjects still detect no change.
- The best explanation is that subjects have post-saccade qualitative states that reflect the change, but *the states aren't conscious in respect of the relevant quality.*
- The finding that undetected qualities have priming effects helps confirm this (Fernandez-Duque and Thornton, 2000, 2003, Silverman and Mack 2006, Laloyaux, Destrebecqz, and Cleeremans 2003).

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- Block urges that Anton's syndrome patients, who are blind but confabulate not being blind, have HOTs about their visual states (2008). This is unlikely; these patients deny being blind but are typically evasive about any actual cases of seeing (though some do seem to generate appropriate imagery [Goldenberg, Müllbacher, and Nowak, 1995]).
- Some patients in other disorders do confabulate particular states, seemingly in a way that's subjectively noninferential and nonobservational. So they likely seem to themselves to be in those confabulated states—as Grimes' subjects take themselves see pre-change stimuli no longer there.

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- Block has argued that only a first-order view can explain why it seems hard to explain why particular neural states result in a particular conscious qualitative states—or any at all (2007, 2008, forthcoming).
- First-order theories do make explaining that seem hard, since they conflate a state's having qualitative character with its being conscious, thereby *preventing any informative account of either*. And without such accounts, conscious mental qualities *will seem inexplicable*.
- By avoiding that conflation, TP makes such informative accounts possible.

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- Block also claims that pain is *intrinsically bad*, independent of its effects on one's mental life, such as awareness of the pain, and a higher-order theory cannot explain that *intrinsic badness* (forthcoming).
- It may seem *subjectively* that pain is bad independent of its effects, but intuitions about what's intrinsic are seldom reliable.
- Pain is bad for many reasons:  
It interferes with our mental lives and is detrimental to biological function, and it causes a powerful desire to avoid and relieve it. And these effects are all *wholly independent of a pain's being conscious*.

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- Distinguishing a state's mental qualities from *the qualities in respect of which the state is conscious* thus affords more explanatory degrees of freedom.
- Countenancing qualitative states that aren't conscious in any way at all also allows for fruitful explanations.
- Mental qualities occur in subliminal perceiving, resulting in priming and highly reliable forced-choice guessing. But the relevant states evidently aren't conscious, since subjects aren't, from a subjective first-person point of view, at all aware of them, and so can't report them.

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- Block urges that having HOTs is “what consciousness does rather than what consciousness is” (forthcoming; Block’s emphasis). I.e., a state’s being conscious consists not in one’s being aware of it, but in suitable neural activation in connection with the state. And that in turn sometimes results in the relevant higher-order awareness.
- But since such neural activation often results in that higher order awareness, the foregoing considerations—together with the intuitive force of TP—suggest that consciousness consists instead in that very higher-order awareness.

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- Block justifies detaching reportability from awareness on the ground that that affords the best explanation of the data. But since the alternative is at least as good, that justification fails.
- And the foregoing alternative explanations is are arguably better, since the awareness of conscious states they posit is robust enough to distinguish conscious qualitative states from qualitative states that aren’t conscious.
- One might raise independent challenges to positing distinct HOTs, but addressing those is for another day.

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## Summary

- We can reject the general dissociation Block sees between awareness and reportability by instead distinguishing between
  - (1) what mental qualities a state has and
  - (2) which of its mental qualities, if any, the state is conscious in respect of.
- That distinction preserves the pretheoretic intuition of TP that a state is conscious only if one is aware of it in a way that allows reportability, and it affords at least as much explanatory power.

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