

Perceptual Consciousness Plays No Epistemic Role
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Abstract

It is often assumed that perceptual experience provides evidence about the external world. But much perception can occur unconsciously, as in cases of masked priming or blindsight. Does unconscious perception provide evidence as well? Many theorists maintain that it cannot, holding that perceptual experience provides evidence in virtue of its conscious character. Against such views, I challenge here both the necessity and, perhaps more controversially, the sufficiency of consciousness for perception to provide evidence about the external world. In addition to motivating and defending the idea that unconscious perception can and does often provide evidence, I observe that whether or not perceptual phenomenology is relevant to the evidentiary status of perception depends on the nature of consciousness. And I argue that a well-supported theory of consciousness—higher-order thought theory—invites a striking conclusion: that perceptual phenomenology is not on its own sufficient to provide for evidence of the external world.

Keywords: perceptual evidence; justification; perception; consciousness; unconscious perception; higher-order thought

1. Introduction

In the contemporary epistemology of perception, it is often assumed that perceptual experience provides evidence and thereby epistemically justifies perceptual beliefs about the external world (e.g., Pryor, 2000; Schellenberg, 2018).¹ My visual experience of my computer screen would seem to provide evidence, and thereby justify my belief, that there is a computer screen before me. But much perception occurs outside of consciousness, as demonstrated by studies involving masked priming or conditions such as blindsight (see respectively, e.g., Marcel, 1983; Weiskrantz, 1997).² Individuals

¹ I set aside here issues about external-world skepticism, assuming that perception can and often does provide evidence about the external world. Moreover, I write interchangeably about perceptual evidence and justification, assuming a kind of *evidentialism* wherein beliefs are epistemically justified only by evidence (e.g., Feldman and Conee, 1985). Likewise, my focus throughout regards *propositional* justification (i.e. whether perception provides good evidence to form belief) rather than *doxastic* justification (i.e. whether a particular belief is in fact formed in response to the evidence provided by a perceptual state) (see, e.g., Firth, 1978).

² Although ‘consciousness’ and related expressions are ambiguous (see, e.g., Rosenthal, 2005), uses of them throughout refer to *phenomenal consciousness*—the kind of consciousness for which, to use Nagel’s (1974) expression, *there is something that it like to have it*—unless otherwise noted. Phenomenal consciousness is often assumed to be a property of mental

with blindsight, for example, have damage to the visual cortex, which results in their reporting not seeing items presented to certain regions of their visual field known as ‘scotomas’, although they are nonetheless able to discriminate those items in forced-choice situations. Because of the functional similarities between perceptual experience and the states that drive such behaviors, a natural interpretation is that individuals with blindsight can and do see, but do not *consciously* see, items presented to their scotomas. Assuming perception provides evidence, a question arises: what if anything is the difference between the evidentiary nature of conscious and unconscious perception?

Many theorists who have recently taken up this issue have defended what we may call ‘phenomenalism’ about perceptual evidence, which holds that perceptual experience provides evidence in virtue of its having a unique kind of *phenomenal character* or phenomenology—often referred to as its ‘presentational character’ (e.g., Pryor, 2000; Huemer, 2001; Tucker, 2010; Smithies, 2019). Although some versions of phenomenalism might be compatible with unconscious perceptual states’ providing evidence for other reasons, phenomenalism is most naturally interpreted as holding that consciousness is not only sufficient, but also necessary, for a perceptual state to provide evidence. On this view, although the unconscious visual states of a person with blindsight may convey information about the external world in ways that influence her behavior, such states do not provide evidence about the world.

Several theorists have challenged the necessity of consciousness for perception to play an epistemic role (e.g., Burge, 2003; Berger, 2014a; Siegel, 2017; Jenkin, 2020). Building on those insights, my central goal in this paper is to explore a perhaps more controversial conclusion—namely, that perceptual consciousness is not only unnecessary, but also insufficient for evidence

state tokens, although, as we shall see in section 5.1, it is arguably better conceived of as a property of individuals that they exhibit when they are in certain mental conditions (see also, e.g. Berger 2014b; Berger & Brown forthcoming).

about the external world.³ Of course, whether or not perceptual phenomenology is relevant to the evidentiary status of perception depends on the nature of consciousness. And elsewhere, Nanay, Quilty-Dunn, and I (2018) have urged that none of the major theories of the nature of consciousness—that is, our accounts of the difference between unconscious states and their conscious counterparts—give us good reason to hold that perceptual experience but not unconscious perception provides evidence. I reverse the argumentative approach of that paper here. I propose that, on a promising account of consciousness—the so-called higher-order thought (“HOT”) theory (e.g., Rosenthal, 2005; Brown, 2012; Berger, 2014b; Berger & Brown, forthcoming)—perceptual experiences may provide evidence, but not in virtue of their being conscious. Indeed, on the view that I sketch, one may have perceptual phenomenology but no evidence of the external world.

In section 2, I briefly issue some clarifications about phenomenalism and the argumentative strategy pursued here. In particular, I argue that, even if consciousness is not necessary for perceptual evidence, there remains room to capture some of the central insights of phenomenalism. Then, after motivating the idea of unconscious perceptual evidence in section 3, I argue in section 4 against what I take to be the most compelling reasons to think consciousness is nonetheless necessary for perception to provide evidence. I close in section 5 by exploring why the HOT approach to consciousness is compatible not only with consciousness’ being unnecessary, but also insufficient, for perceptual evidence about the external world.

³ Teng (2018) similarly argues that presentational character is insufficient for perceptual evidence, noting that imaginative states might exhibit the relevant phenomenology and yet not justify beliefs about the external world. But my arguments here are distinct from Teng’s in at least two ways. First, I remain neutral regarding whether or not nonperceptual states may exhibit presentational character. Second, Teng argues that perceptual experience provides evidence, though not in virtue of its presentational character; in contrast, I propose in section 5 that even some genuinely perceptual experiences may not provide evidence about the external world.

2. On phenomenalism and presentational character

Phenomenalists urge that it is in virtue of a perceptual experience's distinctive conscious or phenomenal character that it justifies perceptual beliefs. Here is a well-known passage from Pryor introducing the position:

In my view, it's not the irresistibility of our perceptual beliefs, nor the nature of our concepts, which explains why our experiences give us the immediate justification they do. Rather, it's the peculiar 'phenomenal force' or way our experiences have of presenting propositions to us. Our experience represents propositions in such a way that it 'feels as if' we could tell that those propositions are true – and that we're perceiving them to be true – just by virtue of having them so represented (2000, 547, fn. 37).

According to phenomenalism, the fact that my visual experience of my computer screen presents a computer to me in a distinctively forceful or presentational way—in a way that makes it “feel as if it is true” that there is a computer screen before me—explains why the experience provides evidence for my perceptual belief that there is a computer present.

Although I hope to show that consciousness is not necessary for perceptual evidence, I aim throughout to remain otherwise neutral regarding most debates not only about how to unpack phenomenalism, but also within the epistemology of perception more generally.⁴ There remains, for example, some unclarity about exactly to understand the “peculiar” feature of perceptual experience putatively in virtue of which it provides evidence (see, e.g., Gottlieb, 2015; Teng, 2018); for simplicity, I call this property ‘presentational force’, however it may be understood.

⁴ I remain neutral, for example, regarding how to understand evidence, though I of course must reject conceptions of evidence that rule out the possibility that perceptual states, whether conscious or not, may provide it. I assume, minimally, that something is evidence only if it justifies belief (e.g., Kim, 1988). But this account is compatible with various richer conceptions of evidence, such as Williamson's (2000) view that one's evidence is one's knowledge, so long as it remains open that perceptual states may count as knowledge.

Indeed, I argue that unconscious perception may provide evidence largely in whatever way the phenomenalist has in mind.⁵ Even if phenomenologists are correct that perceptual experience provides evidence in virtue of its presentational force, I propose that it is open to construe presentational force not as a kind of phenomenal character, but rather as a feature of perceptual states that contributes to perceptual phenomenology *when those perceptual states are conscious*. We might call this alternative view ‘presentationalism’. According to presentationalism, it is in virtue of the fact that one’s unconscious perceptual state as of a computer screen presents the computer with unconscious presentational force that the state provides evidence that there is a computer present.⁶

To appreciate presentationalism, consider that many phenomenologists endorse not only versions of the so-called ‘content view’ (e.g., Pryor, 2000), on which perception is representational, but also versions of *representationalism*, according to which perceptual experiences’ phenomenal characters are identical with certain of their representational properties (e.g., Smithies, 2019). On a certain propositionalist phenomenologist view, then, just as one can believe that *p* with an assertoric force or wonder whether *p* with an interrogative force, one may perceptually experience that *p* with presentational force—and the fact that perceptual experience can have the same kind of content as belief under a presentational mode explains why the former may provide evidence for latter.

Whatever the structure of perception, a state’s being conscious is arguably a different property than its content or other mental properties (see, e.g., Rosenthal, 2008, p. 830). After all, according to the content view, perceptual states with different contents and attitudes can all occur consciously. Many theorists thus maintain that properties of perceptual states such as contents can

⁵ There are, however, aspects of some forms of phenomenism that I must deny. Phenomenism is, for example, often interpreted as a fairly strong kind of *epistemic internalism*, on which something can count as evidence for a belief only if it is somehow available to the subject (e.g., Alston, 1989). But such a view rules out the possibility of unconscious perceptual evidence from the outset. I therefore proceed on the assumption that at least a weaker form of internalism, or some form of epistemic externalism on which one’s evidence need not be so accessible, is open (for one such form of internalism, see, e.g., Feldman and Conee 2001; for discussion, see Berger, Nanay, & Quilty-Dunn, 2018, pp. 572-573).

⁶ I write that the unconscious state may be ‘as of’ the screen to indicate that I assume, here and throughout, that unconscious perceptual states, like perceptual experiences, are not factive.

occur *unconsciously* and contribute to phenomenology when perceptual states are modulated by consciousness, however it may be understood. A visual representation of red may occur unconsciously—or it might generate reddish phenomenology if that content has an additional conscious-making property. According to Tye’s (1995) well-known *PANIC* version of representationalism, for example, perceptual *abstract nonconceptual intentional contents* (the “ANIC”) are conscious when they are suitably *poised* (the “P”) to impact cognition. I likewise propose that one kind of presentationalism might hold that perceptual representations exhibit unconscious presentational force; what it is to experience presentational phenomenology is to be in such perceptual representations consciously—for example, when the states are suitably poised to impact cognition.⁷

Presentationalism can accommodate many of phenomenism’s related commitments. As is clear from Pryor’s quotation above, for example, many phenomenists additionally defend the view known as ‘phenomenal dogmatism’, according to which perception provides *immediate*, albeit defeasible, justification—that is, justification that does not depend on the justification to believe anything else (e.g., Huemer, 2001; Tucker, 2010). Phenomenalists need not accept dogmatism (see, e.g., Berger, Nanay, & Quilty-Dunn, 2018, p. 575; Smithies, 2019, p. 75), perhaps instead holding that experiences provide evidence only if suitable background beliefs obtain. But if one is drawn to both presentationalism and dogmatism, one could instead embrace what we may call ‘perceptual dogmatism’, on which perceptual states, whether conscious or not, provide immediate justification. My goal is not to develop such additional issues in detail here; rather, my point is simply that one

⁷ If one insists that presentational force is a mode of presentation of states that is, as Chalmers (2004) puts it, phenomenally individuated in terms of what it’s like to be in those states, then we may instead hold that presentational force occurs when a state that exhibits a functional analogue of presentational force—which we might call ‘quasi-presentational force’—is modulated by consciousness. But nothing hangs on this terminological choice.

need not reject the insights of phenomenalism wholesale, even if we downgrade the role of consciousness in providing evidence.

3. Undercutting phenomenalism

If phenomenalists were correct that perceptual experiences but not unconscious perception provides evidence, it is either because presentational force somehow makes perceptual experiences function in the mind in a different way than unconscious perception, or because of the mere difference in consciousness alone, whether or not unconscious perceptual states operate in the mind in the same way as perceptual experience. In the next section, I return to argue that there are no good reasons for that latter position. But for now, I aim to undercut phenomenalism by noting that, as others have observed, unconscious perceptual states function in the same ways as perceptual experiences in virtue of which experiences would seem to provide evidence (see also, e.g., Rosenthal, 2008, section 2; Berger, 2014a, pp. 139ff; Berger, Nanay, & Quilty-Dunn, 2018; Jenkin, 2020).⁸

At first, it may seem that unconscious perception functions in relevantly different ways than perceptual experiences. When one has a visual experience of a computer in good viewing conditions, for example, one typically feels confident in one's belief in the computer. By contrast, though individuals with blindsight are often able to correctly identify stimuli presented to their scotomas in forced-choice situations, they also often seem to be guessing (see, e.g., Weiskrantz, 1997, p. 18; for discussion, see Smithies, 2019, pp. 80ff). If unconscious perception at best supports guesses about one's environment, it might seem not only that unconscious perception does not provide evidence, but also that perceptual experience provides evidence in virtue of its phenomenal character alone. I

⁸ Although I describe such features of perceptual states as 'functional' characteristics, I understand that term broadly to include features such as the states' etiology or other relevant, non-phenomenal, characteristics.

argue that, upon closer inspection, unconscious perception can and does often play the relevant roles to provide evidence.

3.1. Unconscious perceptual evidence

Consider, the striking experimental work by de Gelder and colleagues (2008) with the person with blindsight known as 'TN'. Despite claiming not to be able to see anything, TN was able to navigate a corridor that included many obstacles. It is reasonable to think that TN's unconscious perceptual states provided evidence about the layout of the scene, in virtue of which he was able to successfully navigate the environment.

Like many working in contemporary epistemology (e.g., Alston, 1989; Lyons, 2016), I assume here that only genuinely mental states can provide evidence for beliefs. So, first, why think that such unconscious states count as genuinely mental *perceptual* states, as opposed to merely *subpersonal* states of sensory-information processing or registration—that is, states of subsystems of a person such as the retina and not of the person as a whole (on the distinction, see, e.g., Dennett, 1969)? While I cannot defend here a complete account of perception (but see, e.g., Burge 2010), it is clear that such unconscious states meet many reasonable functional criteria for personal-level perception. Such states modally encode information about elements of the environment in egocentric ways, enable perceptual constancies, and interact with background intentional states. TN's unconscious states must have *visually* presented the obstacles to him from his egocentric perspective—and because of his standing intention or desire to walk down the corridor, caused him to walk around the barriers.

Although the view that there is unconscious perception has been held by many perceptual psychologists for some time (e.g., Marcel, 1983), some argue that putatively unconscious perceptual states are instead either cases of degraded conscious perception or merely subpersonal (for an

overview, see, e.g., Phillips, 2018). But such skepticism about the evidence for unconscious perception often depends on fairly demanding conceptions of perception. While a complete discussion of such challenges is beyond the scope of this paper, in short, either such conceptions are questionable or there is currently insufficient evidence whether or not perception operates in those ways (see, e.g., Berger & Mylopoulos, 2019). For the sake of argument, then, I assume there are genuine unconscious perceptual states that function in the relevant manner.

More importantly, although TN did not spontaneously report beliefs about his environment, it is arguable that his unconscious perceptual states caused *unconscious beliefs* that there were barriers before him. A note on terminology: we often use ‘belief’ in a dispositional way—as the disposition to produce occurrent assertoric thoughts often called ‘judgments’ or simply ‘(occurrent) beliefs’. In the dispositional sense, all beliefs are trivially unconscious. But some dispositional beliefs manifest in conscious thoughts—thoughts that we might spontaneously verbally report, for example. Call these ‘conscious (dispositional) beliefs’. Many assume that all (dispositional) beliefs are conscious in this way. There are good reasons, however, to think that some (dispositional) beliefs are unconscious insofar as they may manifest in *unconscious* occurrent thoughts or beliefs (see, e.g., Rosenthal, 2008; Mandelbaum, 2016; Jenkin, 2020).

Standard belief-desire psychology holds that perception at least often causes belief so that the information contained in one’s perceptual states can interact in content-driven ways with one’s occurrent intentions or desires to produce behavior. My visual experience of my computer causes me to form perceptual beliefs about the computer, which can interact with my intentions to enable me to act on the computer. And although perception might directly interact with intention or desire to cause action in some cases (see, e.g., Nanay, 2013)—such as ballistic movements or fine-grained adjustments to action during ongoing motor control—since TN’s actions were slow and deliberate, it is reasonable to think that he too formed the relevant unconscious beliefs about his environment.

Moreover, such unconscious beliefs must have manifested in occurrent unconscious assertoric thoughts. Beliefs are dispositions and dispositions arguably do not have—or do not have the right kind of—causal powers to interact with one’s other occurrent mental states to produce meaningful behavior.

Like those who are skeptical of the evidence for unconscious perception, some might object that, even if there are such unconscious representational states, they must be functionally unlike belief and so arguably *subdoxastic*, to use Stich’s (1978) expression. Stich (1978), for example, proposes that only genuine beliefs can enter into inference, but many contemporary theorists endorse so-called ‘dual-process’ accounts of cognition, on which conscious thought is slow, deliberate, and inferential, whereas unconscious thought is fast, automatic, and associative (see, e.g., Tversky & Kahneman, 1974; Evans & Stanovich, 2013). If the cognitive states causally downstream from unconscious perception are not beliefs, then perhaps unconscious perception cannot provide evidence, even if it is genuinely perceptual.

But such dual-process views are questionable. There is much evidence not only that unconscious intentional states are functionally akin to conscious belief—they can, for example, enter into inference—but also that unconscious perception can and often does give rise to such states (see, e.g., Rosenthal, 2008; Mandelbaum, 2016). As an illustration, Jenkin (2020, pp. 276-277) cites Reverberi and colleagues’ (2012) experimental work demonstrating that participants presented with successive steps of a *modus-ponens* inference in which one of the premises has been visually masked—and so rendered invisible to consciousness—are nonetheless faster at identifying the conclusions than participants presented with invalid inferences. Since it is unlikely that unconscious perception itself can figure in inference, a natural explanation of such results is that participants’ unconscious perception of the premises provided evidence for occurrent unconscious thoughts about those premises, which were then recruited into unconscious inferences that facilitated their response times.

Crucially, while such unconscious perception plainly does not and cannot present claims to one in such a way that it, as Pryor describes, “feels as if” they are true—such perceptual states lack presentational *character*—these states must function in ways that somehow make perceivers take certain claims to be true. TN must unconsciously take his unconscious perception at face value, lest we be unable to explain why he walks as he does. True, TN was not *aware* of those states—and in that way could not metacognitively judge his states to be accurate or consciously appreciate that he takes them to be accurate in this way. This is why it might appear or TN might report that his judgments about environmental items are akin to guesses. But TN’s unconscious perceptual states still interact with many of his background mental states and behaviors in ways that can only be understood in terms of his mental economy’s regarding them as accurate. In other words, TN’s unconscious perceptual states plausibly exhibit unconscious presentational force—and may thereby provide evidence for (unconscious) perceptual beliefs.

Indeed, unconscious perception would seem to be able to provide the range of kinds of evidence that some phenomenologists posit. Philosophers of perception often draw a distinction, for example, between so-called ‘good’ cases of veridical perception and ‘bad’ cases of illusion or hallucination; some theorists have claimed that good cases in some way provide *more* evidence than bad cases (see, e.g., Schellenberg, 2018). Whether or not that is the case, there is, for example, experimental evidence that the simultaneous brightness contrast illusion, wherein a gray object on a dark background is typically illusorily perceived to be brighter than the same gray object on a lighter background, can be produced unconsciously (e.g., Persuh & Ro, 2012). In other words, there can be and are good and bad cases of unconscious perception.

3.2. The contribution of consciousness

One might nonetheless think that consciousness somehow *adds* something functionally to perceptual states, which renders them evidential. But when we ask what consciousness is or what role it plays in the mind, it becomes far less clear why a perceptual state's consciousness would be relevant to its epistemic status. As Nanay, Quilty-Dunn, and I (2018) have argued elsewhere, none of the major theories of consciousness currently available posit differences between conscious and unconscious perception that would give good reason to deny that the former but not the latter is justificatory.

Consider, for example, the well-known *global-neuronal workspace* (“GNW”) theory of consciousness (e.g. Dehaene et al., 2006), of which Tye’s (1995) PANIC view is essentially a variant, on which the difference between conscious and unconscious perception consists in the availability of a perceptual state to the so-called ‘global-neuronal workspace’: a central psychological/neural system—usually thought to be realized in the frontal/parietal areas of the brain—that enjoys long-range neural connections to many cortical areas. Setting aside the plausibility of GNW theory in general, why would the fact an unconscious perceptual state cannot have such impact on cognition entail that the state does not provide evidence? Perhaps GNW theory entails that one would not *form* beliefs on the basis of those unconscious perceptual states, but that does not entail that those perceptual states do not provide evidence for beliefs, were they formed. Similar remarks go for other theories of consciousness, which maintain that it consists in functional roles such as sufficient informational integration (e.g., Tononi, 2012).⁹

I return in section 5 to explore the specific epistemic implication of a particular theory of consciousness, HOT theory. Before turning to that, however, I note that phenomenologists might

⁹ My arguments in this section echo Rosenthal’s (2008) claim that consciousness has no function vis-à-vis rationality, although Rosenthal’s primary focus regards whether or not *intentional* states’ being conscious is required for various mental functions such as inference or intentional action, whereas my focus concerns the relationship of consciousness to *perceptual* evidence. Rosenthal (2008, p. 830) does note, however, that Weiskrantz (1997, chapter 7) argues that consciousness affords some utility to perception, maintaining that only conscious perception may give rise to *flexible* thinking about perceptual content. But even if Weiskrantz were correct, it would only demonstrate that perceptual consciousness has some function, not that unconscious perception cannot provide evidence.

object to the forgoing in several ways; in the next section, I consider what I take to be the most compelling arguments against the possibility of unconscious perceptual evidence.

4. Against unconscious perceptual evidence

In his recent book-length defense of phenomenalism, Smithies (2019) remains neutral regarding whether or not consciousness can be functionally understood. But he argues, among other things, that, even if unconscious states were functionally akin to their conscious counterparts, perceptual experiences provide evidence not in virtue of their functional role, but in virtue of their phenomenal character alone.

4.1. Smithies' Arguments

I take Smithies to provide three main arguments. His first argument, which we might call the 'Argument from Blindsight' (e.g., 2019, p. 81), holds that if unconscious perception provided evidence, then individuals with blindsight would seem not to be rational. Smithies' arguments assume evidentialism, according to which the fundamental epistemic norm, from which all other epistemic norms follow, is that one ought to proportion one's beliefs to the evidence (see fn. 1). On this view, if one is ideally rational, and one has evidence that p , then one should form the belief that p . TN does not, however, seem to proportion his conscious belief this way—he does not and would not spontaneously report that there are obstacles in his path, suggesting that he does not consciously believe or is at least apt to withhold conscious belief in the presence of the obstacles. But since blindsight does not seem to be a defect in rationality, but rather a problem with how one's perceptual system operates, it would seem that unconscious perception does not provide evidence.

Smithies' second argument (e.g., 2019, p. 87ff) depends on the conceivability of a version of so-called 'superblindsight'—the imagined condition wherein people with blindsight become automatically capable of forming beliefs about visual stimuli presented to their scotomas (e.g., Block, 1995, p. 233)—and so we can call it the 'Argument from Superblindsight'. Smithies urges that our intuition about such a condition should be that individuals with superblindsight are no more justified in forming their automatic beliefs about what is presented to their scotomas than actual people with blindsight would be, as it is hard to see why the difference in confidence would matter for whether or not such beliefs are justified.

Smithies' third argument (e.g., 2019, p. 241)—what we can call the 'Argument from Epistemic Akrasia'—holds that if unconscious perception provided evidence, then people with blindsight could and would have evidence that justifies so-called 'epistemic akrasia', wherein we believe conjunctions that are epistemic versions of what is often called 'Moore's Paradox' of the form:

- a) p , but I do not have justification to believe that p .

Since TN would verbally deny that he sees any obstacles in his path, he is plausibly justified in holding that he does not have any evidence of the obstacles, or at least in withholding judgment about them. But if TN has unconscious evidence of those obstacles, and is thereby justified in believing that there are such obstacles, then it would seem he would be justified in believing the following Moorean conjunction:

- b) There is an obstacle in my path and I do not have justification to believe that there is an obstacle in my path.

TN would, of course, never report believing a conjunction such as (b). The problem, however, is that it would seem that if unconscious perception provides evidence, he would be justified in believing that. But since it is never rational to believe Moorean conjunctions—and one cannot have evidence for what is irrational to believe—it seems that unconscious perception cannot provide evidence.

4.2. Replies to Smithies

I now sketch two broad ways the proponent of unconscious perceptual evidence might reply to these arguments, which at bottom disagree about the relationship of unconscious evidence to conscious belief.

4.2.1. The Not Ideally Rational Reply

The first option is to reject the premise of the Argument from Blindsight on which blindsight does not involve a deficit in rationality. On this ‘Not Ideally Rational Reply’, people with blindsight ought to form conscious beliefs on the basis of their unconscious evidence—TN ought to believe consciously that there is an obstacle in his path—and are thereby less than ideally rational for their failure to do so.

This proposal is not as questionable as it may initially seem. Much psychology, not to mention philosophy, regards people in general as often less than ideally rational. We all harbor, for example, a plethora of well-known cognitive biases (e.g., Tversky & Kahneman, 1974; Evans & Stanovich, 2013). And even if blindsight is a *visual* deficit, there is much evidence that ordinary perceivers may unconsciously perceive more than one might have thought, as suggested, for example, by studies of masked priming. Once we recognize that we all have an unconscious mind, the idea that any of us could be—or even should aim to be—ideally rational becomes less

persuasive. Facts about the architecture of our minds entail that, since we are unaware of our unconscious perceptual evidence, we are often or even always incapable of proportioning all of our conscious beliefs to that evidence the first-person perspective alone—and are in that way to some extent rationally deficient.

We might nonetheless distinguish, as some do (e.g., Scanlon, 1998, pp. 25ff), two kinds of failures of rationality: instances of (arguably rare) *blameworthy* irrationality (e.g., believing a Moorean conjunction or outright contradiction) and instances of (arguably widespread) *blameless* departures from an inhuman ideal rationality. On this view, failures to proportion one's conscious beliefs to one's unconscious perceptual evidence are not correctly described as 'irrational', but as at best only blamelessly 'not ideally rational'. Indeed, we might even rethink the notion of ideal rationality in light of these facts about unconscious evidence.

With regard to the Argument from Superblindsight, then, this view holds that people with superblindsight *are* justified in forming conscious beliefs on the basis of their unconscious evidence. If people with blindsight are justified in holding such conscious perceptual beliefs, though they do not form them, then people with superblindsight are also justified in holding such beliefs, which they do form. While this conclusion may strike some as unintuitive, intuitions in the philosophy of mind do often differ—and one would hope that the considerations marshalled in section 3 would weaken whatever intuitive resistance there might be to this consequence.

This reply also entails that people with blindsight are justified in believing Moorean conjunctions such as (b), but, because of their rational deficits, would never form such beliefs. Some may accept this upshot of the view. But others might think one cannot have evidence for Moorean conjunctions and be rational in any way, even if one would not and could not believe those conjunctions. Another option, then, would be to argue that TN is not justified in believing the Moorean conjunction (b) for other reasons. Perhaps, for example, there are epistemic coherence

norms against believing such conjunctions that are *sui generis*. But since this proposal amounts to rejecting evidentialism, I do not explore it in further detail here (but see, e.g., Worsnip (2018), who rejects evidentialism on the grounds that we putatively can have evidence for incoherent beliefs).

In any case, it may strike some as doubtful that people with blindsight, despite consciously doing the best that they can epistemically, must thereby fail to be ideally rational. I thus explore a second option that does not have this implication.

4.2.2. The Different Kinds of States Reply

Smithies' arguments assume that all of one's unconscious perceptual evidence should impact one's conscious-belief system. But one might think instead that norms of epistemic rationality only apply to mental states *of the same kind*.

According to this Different Kinds of States Reply, the Argument from Blindsight fails because the premise that people with blindsight do not proportion their (conscious) beliefs to their (unconscious) evidence is too broad: the evidentialist principle should be restricted to hold that one ought to proportion one's beliefs of a particular kind to one's evidence of that kind. People with blindsight are thereby rational insofar as they can and do proportion their unconscious beliefs to their unconscious perceptual evidence, and not irrational because they withhold conscious belief on the basis of that evidence. Likewise, Smithies' intuitions regarding superblindsight can be respected: we can agree that people with superblindsight are not justified in forming conscious beliefs based on unconscious perception, although they are justified in holding and arguably do hold unconscious beliefs based on that evidence. And the Argument from Epistemic Akrasia is likewise unsound because TN may be justified in unconsciously believing the first conjunct of (b), in consciously believing the second conjunct of (b), but not justified in

believing the conjunction because justification fails to distribute over conjunction across mental kinds.

The idea that the epistemic norms might be restricted in this way is not *ad hoc*—and is defended on independent grounds by many theorists. Greco (2015) argues, for example, that failures of iterative epistemic principles such as the ‘KK principle’—that if *S* knows that *p*, then *S* knows that *S* knows that *p*—may be explained not by the failure of the iterative principle generally, but by the fact that the beliefs that fail to iterate are of different kinds. Indeed, many have argued that the mind is *fragmented* or *compartmentalized* (e.g., Lewis, 1982; Mandelbaum, 2016)—and so one might think that epistemic norms only apply to mental states within mental compartments. While I am not arguing that conscious and unconscious states necessarily belong to distinct mental compartments, I propose that it is open to deny that epistemic principles necessarily apply to mental states of *any* kind.

As Smithies observes (e.g., 2019, p. 301), however, standard ways of thinking about belief compartmentalization hold that failure to integrate one’s beliefs across one’s whole belief system nonetheless amounts to a failure of ideal rationality (e.g., Stalnaker 1984). It may seem, for example, that TN’s unconscious belief in the first conjunct of (b) would be in tension with his conscious belief in the second conjunct—and so he remains less than ideally rational. But on the view proposed here, it may be good for us not to hold beliefs in tension in this way, but such tensions are not *rational* tensions. And it is compatible with this view that (epistemic) norms other than norms of rationality, such as a commitment to the truth, may explain why one might have an obligation to get all of one’s beliefs in line.

Smithies (2019, chapter 4) maintains, however, that beliefs are not individuated only functionally, as I have assumed, but rather in part by the epistemic norms that bind them—and so if the same epistemic norms that apply to (conscious) beliefs do not apply to a certain class of

mental states, even if such states are functionally equivalent to belief, the latter must be subdoxastic. It might seem, then, that this proposal bifurcates the mind into two epistemic systems of completely distinct kinds of states. But, again, there are reasons to think that there are genuine unconscious beliefs. For one thing, most theories of consciousness hold that the very same token belief can occur consciously and not. On GNW theory, for example, the same token belief is conscious if it is suitably broadcast and unconscious otherwise. And, more to Smithies' point, even though the norms of epistemic rationality do not apply *across* the conscious/unconscious boundary, it is arguable that all kinds exhibit structurally similar norms that apply *within* each kind.¹⁰ The mind is thus not bifurcated in any objectionable way.

Working out the details of which reply is to be preferred is a project for another time. My point here is it remains open to think that unconscious perception can and does provide evidence.

5. The HOT theoretic approach to consciousness and perceptual evidence

Although many theories of consciousness would seem compatible with consciousness' being unnecessary for perception to be evidential, many theories would still seem to regard consciousness as sufficient for perception to provide evidence. According to GNW theory, if unconscious perception alone provides evidence, then in conscious perception we arguably have perceptual evidence as well, as experience is just perception suitably modified—that is, suitably available to cognition.

¹⁰ One might doubt that there are counterparts of all norms of epistemic rationality for both conscious and unconscious mental states. Smithies, for example, motivates and defends an iterative epistemic claim that he calls the 'JJ principle', on which "you have justification to believe that *p* if and only if you have higher-order justification to believe that you have justification to believe that *p*" (e.g., 2019, p. 229). While such a principle arguably does apply to conscious evidence and beliefs, it is hard to see how or why one's having evidence for the unconscious belief that *p* would justify the unconscious belief that one has justification for the unconscious belief that *p*. But the JJ principle is arguably internalist—and so questionable in the current context. A defense of whether and what epistemic principles apply to particular kinds of states is, however, a topic for future research.

The case for the sufficiency of consciousness for perceptual evidence is, however, far less clear given a particular kind of theory—the higher-order thought (“HOT”) theory of consciousness, as notably developed and defended by Rosenthal. Since a range of commonsense and experimental considerations supports HOT theory (see, e.g., Rosenthal, 2005; Lau & Rosenthal, 2011), I regard it as one of the most promising theories of consciousness currently available. I do not, however, offer a complete defense of this view. Rather, I explore a conditional: *if* we accept this approach to consciousness, what should we conclude about the epistemic role of perceptual consciousness?

5.1. The basics of HOT theory

According to higher-order (“HO”) theories in general, consciousness consists in a kind of HO awareness of one’s typically first-order (“FO”) mentality. On HOT theory, such awareness is engendered by HO thoughts of a particular kind. One has a visual experience of red, for example, just in case one has HO awareness of oneself as being in a FO state of seeing red via a suitable HOT.

Perhaps the central motivation for the HO approach is what Rosenthal (e.g., 2005, p. 4) has called the ‘transitivity principle’ (“TP”). Commonsense psychology would seem to have it that if one is in a mental state, but in no way aware of oneself as being in that state, then one is not in a conscious state. But the contrapositive of this claim, the TP, is that one has an experience only if one is somehow aware of oneself as being in a mental state.¹¹ FO theories such as GNW, which deny consciousness consists in any HO awareness, do not seem to be readily able to explain or implement the TP.

¹¹ The TP may seem circular. But, as Rosenthal notes (e.g., 2005, p. 4), the TP rather reveals an ambiguity in expressions such as ‘conscious’ or ‘aware’ insofar as it seeks to explain *state* or *phenomenal* consciousness in terms of one’s *transitive* awareness of states.

Crucially, it is thus enshrined in common sense, and codified by the kind of HOT theory that I explore here, that consciousness is, as Rosenthal often puts it (e.g., 2011, p. 431), a matter of *mental appearance*—a matter of how one’s mental life seems to one. On this kind of view, to have a visual experience of red just is to have the suitable mental impression that one sees red—for it to (suitably) seem to visually seem that there is red. According to HOT theory, suitable HOTs are both necessary and sufficient for the mental appearances that constitute consciousness.

That suitable HOTs alone engender consciousness can be illustrated by the possibility of so-called ‘misrepresentational’ or ‘targetless’ HOTs. In general, one’s awareness (including regarding features of oneself) can go awry in various ways. It can seem to one that one has blue eyes when in fact one has brown eyes. HOT theory is likewise compatible with the possibility that one can be aware of oneself as being in perceptual states that one is not in fact in. If, for example, it suitably seems to one that one sees red, then HOT theory holds that one has a perceptual experience as of red with its attendant reddish phenomenology, even if one sees green, another color, or nothing at all.

Such possibilities have struck many critics of the approach as highly problematic or even incoherent (e.g., Block, 2011; Edwards & Platchias, 2018). Indeed, many theorists deny that there is or could be appearance/reality gap for the mind (e.g., Nagel, 1974, p. 174). But as Rosenthal (e.g., 2005, pp. 43ff) and others have persuasively argued, there is no good reason to assume this; moreover, the ability to accommodate such cases is theoretically advantageous, as it enables HOT theory to explain otherwise puzzling phenomena such as Charles Bonnet syndrome, wherein individuals report complex color phenomenology despite neural and behavioral evidence that they do not see colors in their environment (see, e.g., Rosenthal, 2011; Lau & Brown, 2019).

To be clear, suitable HOTs need not and typically do not modify in any way the states in which one is aware of being (e.g., Rosenthal 2005, p. 185). Some do interpret HOT theory this way,

holding that suitable HOTs transfer the property of consciousness to their actually existing FO targets, thereby making those FO states conscious (e.g., Gennaro, 2012). Brown (2012) calls such interpretations of the view ‘relational’ readings of HOT theory. But these relational views are distinct from what Brown (2012) calls the ‘nonrelational’ Rosenthalian version of HOT theory presented here, on which the relevant HOTs are necessary and sufficient for consciousness. Moreover, such relational modifications of the HO approach cut against the idea that consciousness is a matter of mental appearance—and are problematic for additional reasons (see, e.g., Rosenthal, 2011). HOT theory thus does not conceive of consciousness as a property that attaches to existing FO states, as is often assumed, but rather as a feature of creatures that they exhibit when they are suitably aware of being in mental states (see, e.g., Berger, 2014b).

5.2. Consciousness and perceptual evidence

The possibility of targetless HOTs also illustrates something important for the epistemology of perceptual consciousness. Although most philosophers of perception draw a distinction drawn between good cases of veridical perception and bad cases of illusion or hallucination, if HOT theory is correct, it would seem that there are *two kinds* of good/bad cases. What we can call ‘bad FO cases’ occur when one’s FO perceptual states do not accurately present aspects of the world—when, for example, is in a visual state as of something red, when in fact there is nothing red, but perhaps instead something green. *HO bad cases*, in contrast, occur when one’s HOT does not accurately present one’s mental life to one—when, for example, it suitably seems to one that one sees green, when in fact one does not see green, but perhaps instead something red.

Given this distinction, does conscious perception provide evidence? One might think that, even if one is in a HO bad case wherein one has a visual experience as of green when in fact one sees red, one has perceptual evidence of green. After all, there consciously appears to you to be

green. But I urge that the right thing to conclude is that one has *perceptual* evidence of red, not green. On a HO perspective, perceptual phenomenology is not, strictly speaking, about the world. Consciousness reflects how one's mind appears to one. And it is not obvious that the fact that it seems (suitably or otherwise) that one sees green is equivalent to the fact that one has evidence of green. At best, it seems that one has evidence about one's mind: that one is in a visual state as of green. The HOT approach is thus compatible not only with consciousness' being unnecessary for perceptual evidence, but also with consciousness' insufficiency for perceptual evidence about the external world.

Perhaps it appears too extreme to hold that perceptual experience plays *no* epistemic role. Of course, even if cases of HO misrepresentation are possible, they are likely rare; when one perceptually experiences, one is at least typically in the perceptual states of which one is aware. We might thus say that if perceptual experiences provide evidence of the external world, they do so not in virtue of their consciousness, but in virtue of the actual perceptual states of which one is aware—that is, only in HO good cases. This is not because one has more evidence, or evidence at all, in good cases alone. This view is compatible with one's having misleading perceptual evidence in FO bad cases. It is because only in HO good cases are there actual perceptual states as of the external world. In other words, rather than being the grounds of one's perceptual evidence as phenomenalism claims, perceptual phenomenology is irrelevant to one's perceptual evidence.

One might object that it is a reasonable epistemic principle that the evidence of evidence is evidence. One might urge that since one's perceptual experience as of green is an awareness of oneself as seeing green, and since one's being in a state as of seeing green is evidence green is present, one has evidence that green is present, even if one does not actually see green. A HOT theorist could grant this point, urging that conscious and unconscious perception can produce conflicting evidence. But this evidential principle is questionable for reasons that would take us too

far afield here (see, e.g., Tal & Comesaña, 2017). And even if the principle were correct, it would still seem that perceptual experience at best provides *oblique* evidence of the external world: my perceptual experience as of a computer provides evidence that I see a computer, which suggests only indirectly that there is a computer. Only perception, whether or not it is conscious, provides evidence of the external world that could be regarded as immediate.

More pressingly, one might worry that such considerations entail that HOT theory cannot explain presentational character at all. Indeed, Gottlieb (2015) has objected to HOT theory on the grounds that it cannot explain such character—and so one might likewise object from the outset to the project of exploring HOT theory’s implications for perceptual epistemology. In short, Gottlieb argues that HOTs are by hypothesis ordinary thoughts and ordinary thoughts cannot engender presentational character.

But according to HOT theory, if there is such a thing as presentational force, it is something that FO perceptual states exhibit, not the relevant HOTs. In other words, HOT theory is compatible with presentationalism, which explains why it holds that perceptual evidence of the external world is a function of FO perceptual states. All that suitable HOTs do is make one aware of oneself as being in such FO states. Presentational character consists in this suitable awareness of states with presentational force. What it is for my visual experience as of my computer screen to make it “feel as if it is true” that there is a computer screen before me—what it is for me to experience presentational phenomenology—is for my HOT to make me suitably aware of myself as visually presented with a computer screen. Since perceptual states function in ways that somehow make perceivers take certain claims to be true, perceptual phenomenology simply inherits this presentational appearance insofar as HOTs represent us to ourselves as being in those states. Gottlieb’s objection thus misses the mark as HOTs need not *exhibit* presentational character; they

must simply be able to make one suitably aware of oneself as being in states with presentational force, which HOTs might do (for more, see Berger & Brown forthcoming).

This view of perceptual evidence is compatible with both the Not Ideally Rational and the Different Kinds of States views sketched above. The Different Kinds of States Reply seems quite reasonable on a HOT theory: the conscious thought that red is present *just is* the suitable HOT that one thinks that red is present—and it is hard to see why unconscious perceptual evidence of red would justify a thought that one thinks that red is present. Likewise, it seems reasonable to hold that there is no rational tension between one's having such (unconscious) evidence and one's conscious thought that one does not have that evidence—that is, one's HOT that one thinks that one does not have evidence of red. But HOT theory is also compatible with the Not Ideally Rational Reply. Perhaps together with some background assumptions about how perception and the world work, the unconscious evidence of red might justify the thought that one thinks that red is present.

These conclusions may nonetheless strike some as wholly implausible. One might regard these epistemic implications of HOT theory as a reason to reject it. Or one might insist that HOT theory be modified so as not to entail such conclusions about perceptual experience. Edwards and Platchias (2018), for example, pursue a version of the latter route. Since they assume that perceptual experience can and does provide immediate epistemic warrant, Edwards and Platchias propose a relational reading of the view on which conscious perception constitutively involves both an accurate perceptual state and an accurate HO belief about that actual state, which is suitably warranted by the perceptual state.

But rejecting nonrelational HOT theory as I have articulated it because of its epistemic implications would be to begin one's reasoning with an assumption about the nature of perceptual justification—and draw conclusions about the nature of consciousness from those epistemic consequences. Such a methodology puts the epistemic cart before the metaphysical horse. We

should rather start from a metaphysically well-motivated theory of consciousness and explore what if anything it says about consciousness' epistemic role.

6. Conclusions

I have argued that perceptual states provide evidence for beliefs about the world independently of their consciousness. Indeed, I have argued for the conclusion that, on a particularly promising theory of consciousness—HOT theory—perceptual consciousness is not sufficient for perceptual evidence; there can be cases of perceptual phenomenology that do not engender evidence about the external world. These positions may require us to rethink the logic of rationality to some extent, as they entail that we need not be aware of all of the evidence that we in fact possess—and may seem to have perceptual evidence that we in fact do not possess. But these positions need not entail that we are irrational. Rather, we should rejoice insofar as we may often have far more (perceptual) evidence than mere consciousness can provide.¹²

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