Blindsight, Blandsight, and Blingsight: Unconscious Perception, Attention, and the Epistemology of Perception[1]

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Abstract:

There is a debate about whether attention is necessary for your conscious perceptual experiences to justify your beliefs about the external world. This debate has tended to be silent about what unconscious perception might do for our beliefs about the external world. There is also a debate about whether consciousness is necessary for your perception to justify beliefs about the external world. This debate has tended to be silent about what role attention might play in relation to unconscious perception. Here I bring these debates together, and examine whether attention is necessary for your unconscious perception to justify beliefs about the external world. After clarifying the key terms and positions in the debate, I review and refine the case for unconscious perceptual justification. I then argue that unconscious perception can both occur without attention and justify our beliefs in such cases.

Introduction

You were paying attention only to your phone, then your attention shifted and you realized that the sound of the crosswalk is on---might you already have consciously heard the sound of the crosswalk when you were not yet attending to it? There has been a massive debate in philosophy and psychology about whether our conscious perception of something is ever inattentive. According to figures such as Mole 2010 or Dicey Jennings 2020, the answer is "yes"---you sometimes consciously perceive more entities than those to

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which you attend (be they objects, properties, or other entities still). According to figures such as Prinz 2012 or Montemayor and Haladjian 2015, the answer is "no" --- you consciously perceive only those entities to which you attend. Here attention functions as a bouncer for the nightclub of the conscious mind.

There has also been a debate about whether attention is required for our conscious perception to justify beliefs about the external world. Suppose Kris did consciously hear the sound of the crosswalk before he attended to it. Could that inattentive perception also have given him reason to believe that crosswalk is on? Even if one allows for conscious perception without attention, one might still think that attention is necessary for conscious perception to justify beliefs. Here attention would serve as a bouncer for the VIP Room of perceptually justified belief.

As important as those specific questions are, my focus here is not on them. I instead want to map out how analogous questions arise more broadly than has been acknowledged up to now, and I will at least begin to answer them.

Just as we can ask whether attention is necessary for conscious perception, we can ask whether attention is necessary for unconscious perception. Perhaps conscious perception does require attention, but unconscious perception does not. Or it could even be that conscious perception does not require attention, but unconscious perception does.

Further, just as we can ask whether attention is necessary for conscious perception to justify belief, we can also ask whether attention is necessary for unconscious perception to justify belief. Assuming again that there is unconscious perception, attention might be necessary for it to justify our beliefs even if attention is not necessary for unconscious perception to arise in the first place. And attention might be necessary for unconscious

perception to justify belief even attention is not necessary for conscious perception to justify belief.

We are in quite a thicket (and I am even bracketing the complication that attention itself comes in conscious and unconscious forms!). To orient us, I will begin by reviewing the existing case for there being unconscious perception in the first place, trying to make some new points along the way. Here we will examine whether putative cases of blindsight are merely misdescribed cases of conscious vision---mere *blandsight* as it were. I will then more extensively defend the view that unconscious perception justifies some beliefs. My running theme will be that there needn't be anything unusual or alienated about the justificatory role of unconscious perception, in an important sense we all are blindsighted subjects some of the time. While my stage setting will be extensive, it is essential. Unconscious perception without attention cannot justify unless there is unconscious perception in the first place, and unless unconscious perception is able to justify in the first place. Our questions will then be whether unconscious perception ever occurs in the absence of attention, and whether it ever justifies beliefs when unconscious perception occurs in the absence of attention. I will argue that the answer to both of those questions is "yes".

1. XOXO: The Case for Unconscious Perception

A classic potential example of unconscious perception is so-called blindsight. In cases of blindsight, where some visual capacities are preserved even though the V1 area of the cortex is damaged, people seem to lack conscious perception while retaining

perception.[2] As evidence for the presence of perception, consider that blindsighted subjects are able to reliably categorize the vertical or horizontal orientation of a stick when prompted to guess in a forced choice format, or to perform with similar success in categorizing a shape in their blinded field as an X or and O. Or consider the success of a blindsighted subject in navigating a hallway littered with obstacles, or in putting a letter through a slot. To explain these successes, you might think that they do perceive. As evidence for blindsighted subjects' lack of consciousness, we might try to take their word for it. Consider the words of the famous patient DB himself, when first learning of his reliable performance in guessing the orientation of a stick:

> 'Did you know how well you had done?', he was asked. 'No,' he replied, 'I didn't—I couldn't see anything; I couldn't see a darn thing.' 'Can you say how you guessed—what it was that allowed you to say whether it was vertical or horizontal?' 'No, I could not because I did not see anything; I just don't know.' (Weiskrantz 1990: 24).

In general, when blindsighted subjects are asked whether they see, they say no.[3]

These strands of evidence, taken together, seem to suggest that people with blindsight lack conscious perception while retaining perception. DB does see the X, as such, even though what it's like for DB to do that is entirely different from what it's like for an ordinary sighted subject to see the same X, as such. In the case of DB, someone is indeed

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[2] For a more nuanced discussion of the neuroanatomy of blindsight, see 4.2 of Morales and Wu 2024, as well as the references therein. One useful recent overview can be found in Derrien et al 2022.

[3] DB himself might be a tricky case in the end. Consider the following passage:

> D.B. was questioned repeatedly about his vision in his left half-field. Most commonly he said that he saw nothing at all. If pressed, he might say in some tests, but by no means in all, that he perhaps had a 'feeling' that a stimulus was approaching or receding, or was 'smooth' (the **O**) or 'jagged' (the **X**). But always he stressed that he saw nothing in the sense of 'seeing', that typically he was guessing, and was at a loss for words to describe any conscious perception (Weiskrantz 1990: 31)

home, but the lights are off.

Blindsight is just one source of potential cases of unconscious perception, the full mine goes wide and deep, including for example hemispatial neglect as well as the manipulation of the perception of neurotypical subjects through continuous flash suppression (see Block 2023). In the famous case of hemispatial neglect of P.S. discussed by Marshall and Halligan, when P.S. is presented with pairs of houses, where the house in the neglected field is burning, and the one in the normal field is not, P.S. does not seem to have conscious perception of the burning house as burning. When asked about the houses, after all, P.S. says "they're the same" (Marshall and Halligan 1988: 766). However, when P.S. was given the forced choice question of which house to live in, she chose the house that is non-burning on 9 out of 11 occasions. This pattern at least suggests that she has perception of the burning house as burning despite lacking conscious perception of it as burning (or perhaps of it at all).

But what exactly does it even mean here for the lights to be off or for some perception to be unconscious? We need to get a sharper sense of the different ways the lights can be on in conscious perception. That will provide us with a checklist to cross off to make sure we end up with truly unconscious perception.

One aspect of conscious perception is brought into focus when philosophers talk about "presentational phenomenology", "phenomenal force", or "assertoric phenomenology". Consider the following often quoted---or ritually incanted---passages from Pryor and Huemer:

> … it's the peculiar "phenomenal force" or way our experiences have of presenting propositions to us. Our experiences represent propositions in such a way that it "feels as if" we could tell that those propositions are true... [T]his "feeling" is part of what distinguishes

> the attitude of [perceptually] experiencing that *p* from other propositional attitudes, like belief and visual imagination. (Pryor 2000: 547 fn37).
>
> Even if you have a very vivid, very detailed imagination, or you have very poor eyesight, you still would never confuse seeing a tomato with imagining one. The reason lies in what I call the "forcefulness" of perceptual experiences: perceptual experiences represent their contents as actualized; states of merely imagining do not. When you have a visual experience of a tomato, it thereby seems to you as if a tomato is actually present, then and there. When you merely imagine a tomato, it does not thereby seem to you as if a tomato is actually present. (Huemer 2001: 77).[4]

These passages agree that phenomenal force is something like an attitude towards the content of perception, or a mode of presentation of what we perceive. Phenomenal force is a matter of how you perceive, not necessarily of what you perceive. Despite this partial agreement, notice that these passages do not say exactly the same things. Pryor does not rule out the possibility of mistaking imagining for perceiving or vice versa, and Pryor only takes a stand on part of what distinguishes perceiving from imagining. Huemer himself goes much further with respect to our discriminatory abilities, saying that we cannot mistake seeing with imagining, and also makes the stronger claim that phenomenal force is sufficient to distinguish seeing from imagining.

If phenomenal force is a matter of how you perceive, there might be room for cases of perception that lack phenomenal force, but that remain conscious in other ways. Perhaps you could consciously perceive an x while having visual sensory phenomenology, and yet still lack phenomenal force. As argued by Miyazono 2021 and Teng 2022, actual cases of derealization or the so-called Perky effect involve just that. In cases of derealization, the person does seem to have conscious perception in some good sense,

[4] For a more demanding conceptions of phenomenal force, including provisos about directness, see Chudnoff 2013. Our points below should go through even on Chudnoff's more demanding conception of phenomenal force.

while nevertheless being alienated from it. Consider the following testimonial via Miyazono 2021: 3.1:

> Looking at familiar things during a bad episode upsets me a lot. I look at them, but they don't seem real, they don't look the same and they don't look familiar anymore, even though I know deep down they are, I'm seeing things differently from how I used to, almost like I'm looking at something I know, but it doesn't feel like I know it any more. It feels like I'm looking through someone else's eye. (Sierra 2009: 27)

It is plausible here that the subject has conscious perceptual experience without phenomenal force.

In cases of the so-called Perky effect[5], subjects do in effect seem to confuse seeing a tomato with imagining one (contra Huemer). For example, it seems that they do consciously see a blue beachball, and yet nevertheless they report that they are merely imagining that. Here they arguably have conscious perception of a blue beachball as such while lacking phenomenal force.

Now, alternative accounts of these cases are indeed possible, but whether or not one of them is correct, the conceptual distinction between conscious perception and phenomenal force stands. All that said, derealization and the Perky cases are unusual. Paradigmatic cases of conscious perception involve both phenomenal force and visual sensory phenomenology (and perhaps even further conscious aspects such as affect as discussed by Jacobsen 2021). Perception could then fall short of being paradigmatically conscious by lacking either or both of phenomenal force and visual sensory phenomenology (or perhaps other conscious aspects such as affect).

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[5] Perky 1910, Segal and Gordon 1969, Segal and Fusella 1970, Segal 1972. That said, see Dijkstra and Fleming 2023 for countervailing evidence.

Classic cases of blindsight do not include either phenomenal force or visual sensory phenomenology. But there is conceptual space for something like blindsight to come along with phenomenal force. If the hypothetical subject were to draw a picture of how things look in their blindsighted field, the picture would be blank. The subject would lack the distinctive sensory phenomenology ordinary sighted subjects have when seeing an X. However, the subject could still have a kind of intellectual intuition about their immediate surroundings. They could still feel as if an X is present, and have perceptual states that "represent their contents as actualized."

We may even have actual instances of perceptual phenomenal force without visual sensory phenomenology in cases of what Garric et al 2019 call "blindsense". It's worth reviewing their work given that it has yet to be discussed in the epistemology of perception. The subjects in their study had an objective task of assessing whether something appeared on the screen, and if so whether it was an X or an O, and a subsequent subjective task of self-assessment in each trial using with the following options:

(1) I did not see anything
(2) I don't think that I saw anything, but I am not sure
(3) I felt something
(4) I saw something
(5) I clearly saw something and can identify it.

The typical profile of blindsight would be to have high reliability in the objective task while picking 1 as the option for subjective assessment. But Garric et al also found subjects who were at chance in their performance about whether a letter was present, but who nevertheless when a letter was present tended to say "I felt something" (and tended not to say that when no letter was present). Garric et al suggest that "blindsense patients might instead experience a conscious 'non-visual' sensation in response to visual stimulation

(2019: 308)." What Garric et all mean by "conscious non-visual sensation" is not so clear. A promising way to cash out their view is by holding their subjects experienced phenomenal force with respect whether something has appeared in the target area, without having any form of visual sensory phenomenology presenting anything there (or even representing the merely existentially quantified proposition that something is there). All that said, the Garric et al cases are controversial (see Phillips 2020 for a challenge and Garric et al 2020 for a response).

In sum, when we check for the presence of unconscious perception, we need to make sure that all conscious aspects of conscious perception are missing. Subtracting sensory phenomenology might not be enough to obtain fully unconscious perception. We will have obtained a case of unconscious perception only if we have excluded all of visual sensory phenomenology, and phenomenal force, as well as any other conscious aspects of ordinary conscious perception.

Now that we've clarified what it takes for something to be a case of unconscious perception, let's talk more about the evidence in favor of there being unconscious perception. We had reviewed a broadly behavioral strand of evidence in favor of perception, and a broadly testimonial strand of evidence in favor of the absence of consciousness. (The full body of available evidence does much further, including e.g. neural evidence and various metacognitive measures for consciousness, as discussed in more detail in Irvine 2019, Michel 2021, or Spener 2024).

Each of the classic strands of evidence we reviewed can be disputed. Perhaps blindsighted patients do have visual consciousness but only in a degraded form, and are conservative in their self-attributions of consciousness, so that their reports of the absence

of conscious perception are cases of cautious false negatives (Campion 1983, Phillips 2021). Here we would simply have conscious vision---blandsight in our current terms---rather than blindsight. We should first clarify how the presence of degraded conscious vision might matter here. The proponent of unconscious perception need not rule out the persistence of blandsight in blindsighted or other relevant subjects. The key question is whether they have conscious vision specifically of the stimuli they reliably guess to be present, in doesn't matter whether they also had conscious vision of something else (Lau and Michel 2021). The threatening rival hypothesis is that the subject had blandsight of the relevant stimulus, and was overcautious in their self-ascription of conscious vision. Now, the challenge is typically developed within the framework of signal detection theory, considering the subject's threshold for the self-ascription of consciousness. The objection arguably does not have to be coupled with that framework, however. Regardless of how the strategy of false negatives is developed, it faces objections of its own.

First, why aren't the patients equally conservative in their attributions of consciousness relevant to their sighted fields? We can have degraded conscious vision simply when viewing conditions are poor, no incidence of blindsight is necessary for that. So, if a patient blindsighted in only one field were to have a faint case of conscious perception in their sighted field, would they also tend in those cases to say they don't see at all? Without such evidence, the suggestion of conservative self-report standards threatens to be a mere skeptical hypothesis. And in fact there is contrary evidence developed in Persaud 2011, discussed in more detail by Lau and Michel 2021. Here GY was presented with lower contrast stimuli in his sighted field and higher contrast stimuli in his blindfield. His verdicts were equally accurate about each side, but he reported awareness of what was

presented in the sighted field much more often (43% vs. 3%). This pattern arguably supports the conclusion that his denials of awareness in the blindfield were not the result of a conservative bias.[6]

Second, when blindsighted subjects are asked to describe their perception in an open-ended way, not in a forced choice Y/N context with respect to whether they see, why aren't they more cagey? A higher threshold for the self-attribution of consciousness is well placed to explain the selection of N in a forced choice context, and the absence of a Y self-attribution of consciousness in an open-ended context. But in the open-ended interview format, there is also the option simply of saying "I just don't know whether I saw, maybe I did, maybe I didn't", an option that rarely seems to be taken up. We need an explanation of why, in those contexts, blindsighted subjects go all the way to the denial of seeing. Alleging that the subjects have a high threshold for the self-ascription of consciousness only predicts the absence of a report of consciousness in those contexts. But there is also a denial of consciousness in those open-ended contexts, a denial that is left unexplained by the objector. Here the genuine absence of consciousness seems to be better placed to explain why the subject affirmed the absence of seeing. To put the problem in a different way, the objector is saying that the blindsighted subject needs more to pull the trigger for an attribution of seeing. That might well be, but the objector has left open why the subject

[6] To address the issue more thoroughly, it would also be more satisfying to have information about blindsighted subjects' credences or degrees of belief that they have visual consciousness. If blindsighted subjects have a low level of consciousness, and a high threshold for the self-ascription of consciousness, you might expect them to still have a highish level of credence that consciousness is present, even if their flat-out verdict is no. The absence of such a highish level of credence would give us evidence that they do indeed lack visual consciousness. For some helpful discussion of these complications, see Matthews 2018 and Garric et al 2019.

did pull the trigger for an attribution of non-seeing. Plausibly they did so simply because they lacked visual consciousness.

Finally, a quite different, less discussed challenge is that, if we really are going to defer to the reports of blindsighted patients, why aren't we taking their denials of perception at face value? DB said that he can't see, not that he lacks "visual consciousness" or "visual phenomenal character". If the right move is to defer to DB, we would need to conclude that DB doesn't see, consciously or otherwise. Even if DB does take in information about the world in some unconscious way, it might still be that all that falls short of being perception. As Phillips (2018) argues using Burge's conception of perception, visual perception might require personal-level tracking of spatial constancies or other perceptual constancies, or have other requirements not yet met in the case of blindsight (Johnson 2023 helpfully clarifies that the relevant requirements such as that of objective representation needn't be tethered to occurrence at the personal or subject level). For whatever reason, DB's putative unconscious perception might instead only be an instance of something like sub-personal processing of information without phenomenal character. Here we wouldn't have blandsight or any form of sight. DB might in effect have been telling us this all along!

At a minimum, there is a tension in using reports of the absence of seeing as partial evidence for the presence of (unconscious) seeing. If we take the reports of DB and others at face value, they aren't seeing at all, consciously or unconsciously. And if your conclusion

is that seeing needn't be conscious, it is awkward to use reports about seeing as a litmus test for the distinct question of whether the subject consciously sees.[7]

I will close this section by sketching a surprising further potential source of cases of unconscious perception. Given that reports about seeing needn't amount to reports about consciousness, we in principle could end up with cases of unconscious visual perception that is reportable as seeing. Consider cases in which subjects are presented a stimulus and say that they see it, but cannot offer anything about how the stimulus sensorily appeared (nor even the claim that they "felt" something present). Rather than being failed cases of unconscious perception, it could be that such cases are simply instances of unconscious perception that is reportable. If we are serious about distinguishing talk about seeing from talk about consciousness, and serious about distinguishing consciousness and reportability, we should consider allowing the possibility of unconscious perception that is reportable. In this scenario, a subject saying that they saw need not rule out that they had unconscious perception.

In what follows I will bracket these controversies, as fascinating as they are, and I will assume that there is unconscious perception, and in particular that cases of blindsight indeed are cases of entirely unconscious visual perception of a stimulus.

2. The Epistemology of Unconscious Perception

My task now will be to argue that unconscious perception can be a source of

[7] Although for an interesting interview with the patient GY specifically about whether he has "qualia", see Persaud and Lau 2008. Thanks here to Matthias Michel. More more detail on different phrasings of the relevant experimental prompts, see Spener 2024.

epistemic justification. As we continue to prepare the stage for justification by inattentive unconscious perception, we need to defend the key claim that unconscious perception can justify in the first place.

First some words to clarify the view I will defend. My emphasis will be on the claim that unconscious perception sometimes provides a person with justification to hold a belief, whether or not they actually form the belief on the basis of their perception. In the jargon, unconscious perception sometimes provides propositional justification (this is not to say that unconscious perception is always by itself sufficient to justify). That said, I will also argue that there are cases in which someone's belief that they hold is justified on the basis of unconscious perception (so-called doxastically justified beliefs).

Further, I am not claiming that unconscious perception suffices to provide justification in all cases, I am just maintaining that it justifies in some cases. Compare how when we hold that testimony is a source of justification, we need not commit ourselves to the view that testimony always justifies.

Finally, if unconscious perception succeeds in being a source of justification, that doesn't mean that conscious perception fails. Even if unconscious perception does sometimes justify, it remains possible and I would argue plausible that conscious perception justifies to a higher degree.[8]

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[8] Here I part ways with Berger et al, who argue against:

> what we'll call 'phenomenal-ism' for short – on which perceptual experiences provide justification for beliefs at least partly in virtue of their conscious phenomenal characters (for an overview, see, e.g. the essays in Tucker 2013). Since unconscious perceptual states do not have such character, it might seem that such views suggest that they cannot justify beliefs as well (2018: 573).

Even if perceptual experiences provide justification for beliefs in part in virtue of what it's like to have them, we would at best be approaching a sufficient condition for justification here, by no means a necessary condition. Phenomenalism as formulated here isn't in tension with the view that unconscious perception justifies as well.

I will defend my view by loading up cases of blindsight as much as possible with epistemic gold stars and stickers, while still falling short of adding consciousness. As is standard in the philosophical literature, I will build on real-life cases of putative blindsight with hypothetical extensions. My claims about these cases will not be as directly assessable with further empirical evidence. This is not yet to say that empirical evidence is irrelevant to our hypothetical variants of blindsight.

There are other strategies to pursue, but many of the extant ones are lacking. One strategy is simply to use intuitions about actual cases of unconscious perception involving brain damage such as Marshall and Halligan's P.S. (Berger et al 2018). While it may be difficult to avoid appeal to intuitions about cases at some stage of the debate, I worry that leading off with abnormal cases such as that of P.S. will lead us too quickly to a wall. That said, later we will discuss more mundane neurotypical potential cases of justification by unconscious perception. Another strategy is to argue that the conscious character of perceptual experiences is inert in explaining how perception justifies beliefs (again in Berger et al 2018). I worry this leaves open the possibility that still only conscious perception justifies belief, simply due to some property that fails to ever be shared with unconscious perception, or that fails to ever be shared to the same degree. The question of whether conscious perception is the only perception that justifies is different from the question of whether conscious perception ever justifies in virtue of its conscious character.

So here is a hypothetical blindsighter Clark Kent (CK), about to be prompted to guess whether what is presented is an X or an O. But before the experimenter ask, CK rips off his shirt to reveal a Superman costume beneath, proceeding to confidently (and correctly and reliably) judge that an X is present. Here we in effect have what Block (1995) calls

"superblindsight".[9] CK is able to reliably judge on the basis of unconscious perception that an X is present. Here blindsight allows for unprompted reliable belief formation about the external world.

CK doesn't stop there. Before the experimenter asks why CK thinks an X is present, CK rips off his outer Superman costume to reveal a Superduperman costume underneath, and proceeds to confidently (and reliably) judge that he saw an X present. Here we in effect have what Block 1995 calls "superduperblindsight".[10] Now it turns out that CK is able to reliably and correctly judge that he sees an X present, not just that an X is present. Here we have unprompted reliable belief formation about the internal world as well. The ascent could go even further. We could build in explicitly that CK has access not just to what is in fact the basis of his belief about the world, but also to its role in justifying his belief about the world. We could call this supertrooperblindsight.

We've now done some philosophy of mind, and we have a supercharged example of blindsight. Let's switch to epistemology. Does CK have justification to believe that an X is present from his unconscious perception?

Opinions here will differ, but I submit that the answer is yes. It should help to note that CK has what he needs accordingly to a wide variety of approaches in epistemology. On an admittedly extreme pure reliabilist approach, all he needs is a reliable source for his belief, and he easily has that. On at least some mentalist approaches to epistemology, where only mental states can justify, CK also has what it is demanded, since the source of his justification comes from his own unconscious perception, not say an external guardian

[9] Not exactly though. Block's case involves someone who can prompt himself to guess, ours involves someone who can judge without any guessing at all. See Smithies 2019 3.2.
[10] Again not exactly though. For more see Smithies 2019 3.2.

angel ensuring his beliefs are reliable. Further, on at least some accessibilist approaches to epistemology, CK also has what is demanded. Here the source of his justification comes from a mental state that is in a good sense accessible to him (metacognitively accessible, as Smithies 2019 puts it). (Here I am understanding accessibilism as a view about which sorts of conditions get to be justifiers of our beliefs, rather than as a view about level ascent such as the view that, if you know, then you know that you know). In sum, according to a wide range of promising approaches in epistemology, CK has enough. This is some reason to believe that he does have enough. (I'll develop a separate case below in favor of the claim that unconscious perception sometimes justifies).

The strategy we have pursued is controversial. Smithies' own argument for the opposite conclusion begins by holding that the standard real-life blindsighter lacks justification from his or her unconscious perception, and maintains the same judgment about each hypothetic elevation of the case.[11] For example, when ascending to the superduperblindsighter, Smithies writes

> Does super-duper-blindsight justify beliefs about the blind field? Again, surely not, since there is no relevant difference between super-blindsight and super-duper-blindsight. The only difference is that the super-duper-blindsighter is reliable not only about the objects in his blind field, but also about his visual representations of those objects… If a reliable first-order doxastic disposition is not sufficient to justify first-order beliefs about the external world, then why should adding a reliable second-order doxastic disposition be sufficient to justify higher-order beliefs about the internal world? Intuitively, the super-duper-blindsighter is no more justified in forming higher-order beliefs about subcortical vision than the super-blindsighter is justified in forming beliefs about the blind field on the basis of subcortical vision. And we cannot turn unjustified beliefs into justified beliefs just by adding more unjustified beliefs! (2019: 89)

My own sense is that the Smithies strategy won't persuade any opponents. As I have

[11] For further critical discussion of the Smithies argument, see Berger 2020 or Miyazono 2022.

emphasized, as we gradually reveal the powers of CK, he satisfies the demands of more and more approaches in epistemology. The differences in each rung are relevant differences according to more and more approaches in epistemology, as we ascend from reliabilism to mentalism to accessibilism, and so it becomes less and less plausible through our ascent that none of them are relevant. At a minimum, the claim that the new difference fails to be relevant will simply be a new site for debate.

There are some very interesting further complications about the case of metacognitively accessible blindsight. Consider Smithies' question above, "why should adding a reliable second-order doxastic disposition be sufficient to justify higher-order beliefs about the internal world?" Here he seems to assume that, if you take the superpowered blindsighter to satisfy the demands of access internalist views in epistemology, you must take the blindsighter's higher-order beliefs to be justified by unconscious states. However, in order for an accessibilist demand in epistemology to be properly formulated, the demand actually needs to be put in non-epistemic terms. The access internalist is then able simply to avoid the question of whether the blindsighter's higher-order beliefs are justified, she actually need not assume anything about whether or how they are justified. To see why, consider an epistemic formulation of access internalism: in order for a condition C to give you reason to believe that p, you must have reason to believe that C obtains. Presumably you would have reason to believe that C obtains only thanks to some other condition C2. So an epistemic formulation of access internalism will end up requiring that C gives you reason to believe that p only if C2 gives you reason to believe that C obtains, and C3 gives you reason to believe that C2 obtains, and so on and on and on. This regress is not halcyon and on and on. Far better merely to formulate the

accessibilist constraint on justifiers in non-epistemic terms---here I leave open exactly how (see my 2018 for much more discussion of how to properly understand and formulate internalism). Once we formulate accessibility demands in non-epistemic terms, it will be uncontroversially possible for CK to satisfy them. The access internalist can then retort to Smithies that we can turn unjustified beliefs into justified beliefs by adding more beliefs---that is, by adding (reliably formed) beliefs about the presence of perception of Xs and Os. In sum, if we assign CK's metacognitive beliefs a role in enabling his unconscious perception to justify, we need not beg the question by assuming anything about whether and how his metacognitive beliefs are justified.[12]

There is a further interesting objection to our use of metacognitively accessible blindsight. Here one might appeal to higher-order theories of consciousness of the sort defended by David Rosenthal (2005). According to such theories, suitable awareness of a mental state by a subject is both sufficient and explanatory of that mental state's being conscious for that subject. On this line of thought, if CK has metacognitive awareness of seeing x, then CK's seeing of x ironically turns out to be conscious after all (here I assume that metacognitive awareness counts as one of the right forms of awareness to secure the presence of consciousness).

I argue against higher-order theories of consciousness much more extensively in my 2024, here I just want to emphasize how strong a claim it would be to maintain that suitable awareness of a mental state is sufficient for the mental state to be conscious.

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[12] One might object that I am no longer appealing to canonical versions of access internalism, and so fail to use any claim compelling enough to them to recruit them to the view that unconscious perception sometimes justifies. My reply would be that I am outlining what access internalists should say regardless of what they do say, my treatment of CK should be compelling to them because of that.

Awareness of that form could then never fail to be accurate, and could never be explained by the mental state in question already being conscious. Far better in my view to explain our possession of awareness A of a mental state M in terms of M's being conscious, and to allow for failures in which we putatively have awareness of a mental state without the mental state's being conscious or even being present at all. Consider for instance Anton's syndrome, in which subjects who are blind confabulate that they see. (As an aside, notice that on my approach, the question of whether an AI is ever self-aware is then quite different from the question of whether an AI is ever conscious. On my approach, an AI might well be self-aware, but this will fail to suffice for the AI to be conscious.)

I will address one more important objection before we proceed. Here is the objection in Smithies' words:

> Suppose, for the sake of argument, that unconscious perceptual information in blindsight provides evidence that justifies forming beliefs about the blind field. On this view, blindsighted subjects are less than fully rational insofar as they ignore this evidence in withholding belief about the blind field. But this view seems wrong. Blindsight is not a cognitive deficit in which subjects ignore perceptual evidence that justifies forming beliefs about the blind field. Rather, it is a perceptual deficit in which subjects lack the perceptual evidence that is needed to justify beliefs about the blind field in the first place (2019: 81).

Now we are considering real-world cases of blindsighted subjects, where they do not form full-blown beliefs endorsing their unconscious perception, but instead simply are reliable when prompted to guess (see Miyazono 2022 for further discussion of how Smithies' discussion sometimes bounces between actual and hypothetical cases). According to Smithies, if unconscious perception is indeed a source of justification for beliefs about what is in their blind field, it would then follow that they are irrational in withholding such beliefs (more soon on what "withholding" might amount to).

Now, you could maintain that unconscious perception sometimes justifies in our super-powered cases without maintaining that it does so in actual cases of blindsight. After all, it is built into our hypothetical cases that the subject forms beliefs on the basis of their unconscious perception. Here they are not flouting their perceptual evidence, assuming that unconscious perception gets to supply evidence. That said, here I merely note that option as a fallback.

My first point is small: strictly speaking, blindsighted subjects are not ignoring their perceptual evidence if they fail to take account of it---unfortunately to ignore an annoyance you have to be aware of it to some extent in some way. Ignoring evidence does sound irrational but the blindsighter needn't be doing that.[13]

To address the more important issues here, we need to look more closely at what is involved in "withholding belief". One option is simply the non-formation or absence of belief. In this sense a rock withholds belief too, since it doesn't have any beliefs at all. On this construal it would fail to follow that blindsighters are irrational in withholding belief. Consider the abundance that we presumably consciously perceive, and the fact that we fail to form beliefs endorsing each and every bit of the abundant content of our perception. On many views, our conscious perception, at least when suitably reliable or meeting further conditions, suffices to be a source of justification for beliefs about the external world. And yet we routinely do not endorse the full testimony of our perception, it talks non-stop and says too much. We are not irrational in so doing. If we are indeed "less than fully rational" in so doing, the shortcoming is innocuous and plausible, equally so I would say if applied to

[13] A further wrinkle is raised by Miyazono 2022: n. 3 with some evidence that actual cases of blindsight do involve cognitive malfunction.

the blindsighter. (This is one lesson to draw from the classic example of the speckled hen. Assuming your visual experience does take in the number of speckles facing you before you get a chance to count, you have evidence here that you do not use, without being at rational fault).

Now, philosophers do sometimes bring in a demanding sense of "perceptual belief" where we have perceptual beliefs that invariably endorse the content of perception, even in cases of known illusion such as the Muller-Lyer illusion (e.g. Quilty-Dunn 2015). Sure, you do believe that the lines are of the same length once you have wised up, but the claim is that you also retain a perceptual belief that they are of different lengths. On such an approach it would be false that we routinely fail to believe the full testimony of our perception. I find such talk unhelpful, and to be subject to a dilemma. Either this strong sense of "perceptual belief" collapses into perception, so that we don't have any distinctive category of belief here at all, or else "perceptual belief" fails to invariably accompany perception. (A common move is to say that, in cases of known illusion where we ostensibly fail to believe the world is the way it seems to be in perception, we simply fail to have a "central belief" endorsing our perception, but do have a perceptual belief endorsing our perception. Say that if you like, but then please reinterpret my earlier use of belief in terms of "central belief").[14]

There is another way to construe withholding belief, here as the suspension of belief, where we are dealing with a specific propositional attitude, rather than merely the absence of belief. (We could also consider the intentional omission of the formation of a belief, but I think our discussion would play out the same way).[15] If we construe

[14] Helton and Nanay 2023 develop a more sweeping skepticism about even less demanding notions of "perceptual belief".
[15] For a sample survey of further options here, see e.g. Conee and Feldman 2018.

withholding in this cognitively demanding way, it will fail to be typically true that blindsighted subjects withhold beliefs about what is in their blind fields. They typically don't suspend judgment about the blind field, they instead don't have any attitude whatsoever about the blind field. And here I would say that we too typically fail to suspend judgment about questions left open by our conscious perception and further evidence, instead simply not forming any attitude at all towards them. Again we end up aligned with blindsighted subjects.

We do need to consider the blindsighted subject who explicitly suspends belief about whether there an X is present, even though they would guess yes. Is such a subject irrational in so suspending? Here again I will present an analogy with us (here I expand on Silins and Siegel 2013). Consider how we can fail to notice our conflicting appointments. We have a cluster of beliefs that support each of the conclusions that [we have an appointment to speak privately with A at noon], [we have an appointment to speak privately with B at noon], and [A and B aren't the same person]. Nevertheless, we might fail to use our resources properly to form the belief that we have conflicting appointments, even when we ask ourselves the question. Here we could easily end up suspending judgment even when we did have justification to believe. After all, consider how you might reasonably kick yourself when you see both A and B waiting for you at noon. Your self-admonishment that you should have known better seems to presuppose that you did have good reason to believe you had conflicting appointments.

In the case of conflicting appointments, unconscious beliefs provide us with justification. Given that beliefs can supply justification whether they are conscious or not, it's hard then to see why perception would have to be conscious to provide us with

justification. Until we are provided with a case for needing a special bar for justification by perception, we should accept the unified picture on which perceptions and beliefs can provide justification even if they not conscious. Here we have a further line of support for the view that unconscious perception sometimes justifies.

We are all DB. Not in the sense that we literally are all blindsighted. But in the sense that we all have perception, whether it be conscious or unconscious, that is a source of justification for beliefs we do not form. If there is a failure of rationality here at all, it is one that is overwhelmingly common and to be predicted by our best theories, not something to be avoided. Our mental states, conscious or unconscious, routinely provide us with more justification than we use. Further, if we consider tricky cases where our reflection changes our evidence, we can even see that our mental states sometimes provide us with more justification than it is even possible for us to use.

A further way in which we are all DB is brought out by cases in which we seem to act on the basis of unconscious perception. Here we have a further line of support for the view unconscious perception sometimes justifies. For example, you might be in a café and get the sense someone is looking at you, and look up to see consciously that you indeed are being watched (Berger et al 2018: 570).[16] Or consider how you might space out when driving only to suddenly brake when the car in front of you slows. These are arguably cases in which we navigate the world successfully and rationally thanks to our unconscious

[16] See Byrne 2016: 3.2 and Jenkin 2020: 274-8 for a survey of further precedent cases of justification without consciousness. A quibble about the Jenkin: I would distinguish more sharply between cases of justification by states of which one is ignorant and justification by states that are themselves unconscious. Jenkins for instance discusses "… beliefs and actions that arise out of unconscious feelings of love. In Jane Austen's *Emma*, Emma is in love with Mr. Knightley but is entirely unaware of this fact (2020: 276)." In contrast I want to allow for the possibility that Emma's feeling of love is conscious, although Emma is not aware of the fact/does not know that she is in love.

perception. Assuming some of these cases are indeed ones of of unconscious perception rather than conscious but inattentive perception, they illustrate that justification by unconscious perception needn't be a strange and alienated phenomenon, it might instead already have been part of our everyday lives. Here we all are DB, and have been all this time.

3. Attention and the Epistemology of Unconscious Perception

I've now tried to clarify what unconscious perception might be, and to argue that unconscious perception can be a source of epistemic justification. Let's now turn to questions about attention. Here I will give a brief overview of some important debates about the interaction of attention and conscious perception, and I will then discuss in more detail how these debates arise for attention and unconscious perception.

Conscious perception or blandsight as we called it earlier is often taken to be a self-sufficient source of evidence about the world. When perception of an object comes along with visual attention as well, as when our attention is drawn to a flashy car or to the blingy diamond on an engagement ring, we could call that a case of *blingsight*. In general, you have blingsight of something just in case you perceive it attentively. As we will see in more detail soon, blingsight can itself come in conscious and unconscious forms. Now, does conscious perception in the absence of attention ever give one justification for a belief about the world? Or is attention required? In other words, is blandsight ever enough? Or is blingsight necessary for perception to justify belief?

One debate is over whether attending to something is necessary for one to

consciously perceive it at all (for discussion of how the debate plays out in the case of memory, see REF). The classic empirical argument for the view that conscious perception requires attention draws on studies of so-called “inattentional blindness”. As the name somewhat sneakily assumes, these studies are supposed to show that "there is no conscious perception without attention" (Mack and Rock 1998: 14). They involve subjects who are asked to perform a difficult attentional task, and who fail to report seeing a surprising stimulus which appears during their task, and who indeed may even deny seeing the surprising stimulus. For example, in the infamous case of Simons and Chabris 1999, a striking proportion of subjects asked to count passes of a basketball failed to report seeing a gorilla who wandered into the scene of players. [17]

The studies are striking, but we need much more to use them to establish "inattentional blindness". The key thought is that the absence of report is explained by an absence of experience, which is itself explained in terms of an absence of attention. But this strategy won’t succeed unless rival explanations are blocked or are shown to be less good. Furthermore, there is some empirical evidence in favor of the view that there is conscious perception outside of attention, as in dual-task paradigm experiments in which subjects are able to report some stimuli in the periphery despite the complete or near exhaustion of their attention by a demanding task at the center. In particular, they can report stimuli in the periphery even when very briefly presented, and without detriment to their performance on the central task, suggesting that attention is not occupied by the peripheral

[17] See also Neisser and Becklen 1975, Mack and Clarke 2012, Drew et al 2013, or Ward and Scholl 2015, Pammer et al 2015, Stothart et al 2017, Simons and Schlosser 2017. For some literature reviews, see Jensen et al 2011 or Levin and Baker 2015.

stimuli reported.[18]

In what follows I will assume that there is conscious perception outside attention. Supposing that there is, can it also provide justification for beliefs about the external world?

Here I'll just outline an empirical argument for the view (see REF for more). The dual-task studies just mentioned could be mined for evidence that perception justifies in the absence of attention. In these studies, it seems that subjects can reliably report peripheral stimuli such a face's gender without (top-down) attention to the stimuli. In particular, their performance at discriminating the face's gender in the dual-task condition is strikingly similar to their performance in discriminating the face's gender when their only job is to do that. As Reddy et all say

> When participants performed the face-gender discrimination task alone, performance was on average 77.6% ± 3.8%. This comparatively lower value reflects the short stimulus exposure and the fact that obvious gender cues, such as the presence of facial hair, were removed from the images. Performance on this task in the dual-task condition (74.9% ± 4.0%) was also not significantly different ($F(1, 10) = 1.52$, $p = .2$) from performance in the single-task condition over the group of six participants … In the face-gender discrimination task, performance for all six participants in the dual-task condition was above 90% of their performance in the single-task condition … These results indicate that although there is a decrement in the dual-task condition, face-gender discrimination can still be performed efficiently with little or no attentional resources available, and constitute the main finding of this study (Reddy et al 2004: 109-110).

I assume that the subjects form justified gender-beliefs in the single-task condition on the basis of their perception. Given that their performance is only minimally compromised in the dual-task condition, they presumably continued to form justified beliefs about the peripheral stimuli in the absence of attention in the dual-task condition. Here we plausibly go all the way to justified belief formation on the basis of perception in the absence of

[18] See eg Li et al 2002, Reddy et al 2004, 2006, and especially Matthews et al 2018. For a useful recent survey see Maier and Tsuchiya 2022. For some conflicting discussion, see e.g. Jennings 2020: ch. 5 or Jackson-Nielsen et al. 2017.

attention. If attention is not necessary for the formation of justified beliefs on the basis of perception (so-called "doxastic justification"), it trivially can't be necessary either for the provision of justification by perception in the first place (so-called "propositional justification").

Now, one line of objection to the dual-task strategy points out that subjects might merely have unconscious perception of the peripheral stimuli. Since the reliability of the subjects is not in question here, however, this objection is simply grist for my mill. My goal right now is to secure the justification of belief by inattentive perception, never mind yet whether the perception is conscious or unconscious.

We've briefly reviewed debates about whether conscious perception requires attention to justify or to occur at all in the first place. Let's now turn to unconscious perception. As far as I am aware, there is little discussion of whether unconscious perception requires attention, and of what role attention might play in the epistemology of unconscious perception. But the debates I outlined above can and should be extended to the case of unconscious perception. Here is how.

First, just as we asked whether conscious perception of x requires attention to x, we also can ask whether unconscious perception of x requires attention to x. Oddly enough, we need to consider the possibility of inattentionally blind blindsight! Perhaps when not attending to x, the subject is not blindsighted with respect to x but instead simply blind.

Even once we allow for unconscious perception, it is not trivial that there is ever unconscious perception of some stimulus without attention to that stimulus. In particular, recall the earlier complication over whether we are faced with a full-blown case of perception of x that is unconscious, or instead only something unconscious that falls short

of perception due to failing to be at the subject-level, or failing to be properly objective, or some other reason. It could be that attention is necessary for us to get all the way to proper perception that is unconscious. In this scenario, all blindsight would also be blingsight.

Consider the exchange between Block and Phillips 2016 over a study using continuous flash suppression by Jiang et al 2006. Jiang et al present one eye with a high contrast flickering "Mondrian" pattern that is supposed to suppress conscious vision of the image of a nude presented to the other eye. Nevertheless, their subjects' attention is attracted or repelled by the nude image according to their sexual preferences. Now Block maintains that Jiang et al thereby give us evidence for full blown perception at the subject level, given the congruence of the attentional effect with the participating subjects' individual level sexual preferences (Block and Phillips 2016: 173). I won't get into the further steps of the Block/Phillips exchange (we could name it after the real Mondrian painting, "Broadway Boogie Woogie".) My key point here is that their debate at this stage turns on the role of attention towards the nude. At least as far as Jiang et al's study is concerned, we at best end up with evidence only for attentive unconscious perception, leaving open whether there is ever inattentive unconscious perception. Again, even once we admit unconscious perception, that doesn't settle the question of whether there is ever inattentive unconscious perception.

While it would be fascinating to find studies of whether inattentional blindness occurs with unconscious perception, I have not yet found any such studies. I will instead start by building evidence for the occurrence of unconscious perception in the absence of attention. (Or at least of top-down attention controlled by the perceiver. The possibility that the perceiver's attention ends up captured by the stimulus in a bottom-up way is much

harder to rule out.). Here I will start by mining some findings of Kentridge et al 2004 about the blindsighted patient GY.[19] Kentridge's own aim is to establish that GY does have some unconscious visual attention to entities that GY unconsciously perceives. Here it would follow that visual attention then fails to be sufficient for visual consciousness (for sample dispute, see Prinz 2010). Again, it would also follow that any debates about whether x requires attention can spawn debates about whether x requires specifically conscious attention or specifically unconscious attention! I will continue to set those complications aside, and focus on how the overall evidence Kentridge supplies also supports the conclusion that GY has some unconscious perception in the absence of attention. Unconscious perception then comes in both attentive and inattentive forms.

GY's task was to discriminate the orientation of a bar as horizontal or vertical in a forced choice format. In all trials there was a cue arrow appearing before the bar appeared, 80% of the time pointing to the correct location of the subsequent bar (valid cues), 20% of the time misleadingly indicating a quite different location (invalid cues). GY was informed of the level of reliability of the cue. Kentridge et al's finding was that valid cuing substantially improved both response times as well as accuracy. Consider their graph comparing performance across different periods of stimulus onset asynchrony (SOA):

[19] A further source of evidence here might be Dieter 2015 (thanks here to Julian Matthews).

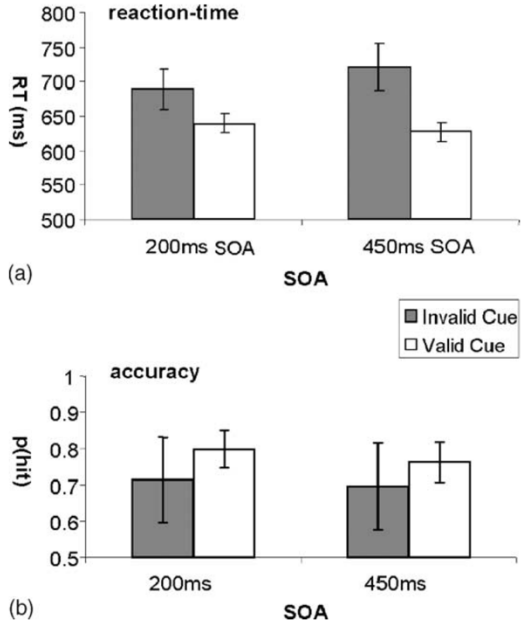


Fig. 2. (a) The effect of cueing on reaction-time. Error bars represent standard errors of the mean. (b) The effect of cueing on discrimination accuracy. Error bars represent 95% binomial confidence intervals.

Regarding statistical significance, note their comment that "the chances of finding even the poorest level of these performances [across all cuing conditions] by chance has a probability $P < 0.01$ (two-tailed binomial, after Bonferroni correction for four comparisons) (2004: 834).". So I take it their finding is robust enough for our purposes. Now, what is most striking for our purposes here is that GY's accuracy is well above chance even when the cuing is invalid.[20] Attention might well yield advantages, but GY already had a notable .7 level of accuracy before attention. Here we seem to have cases where GY's attention is

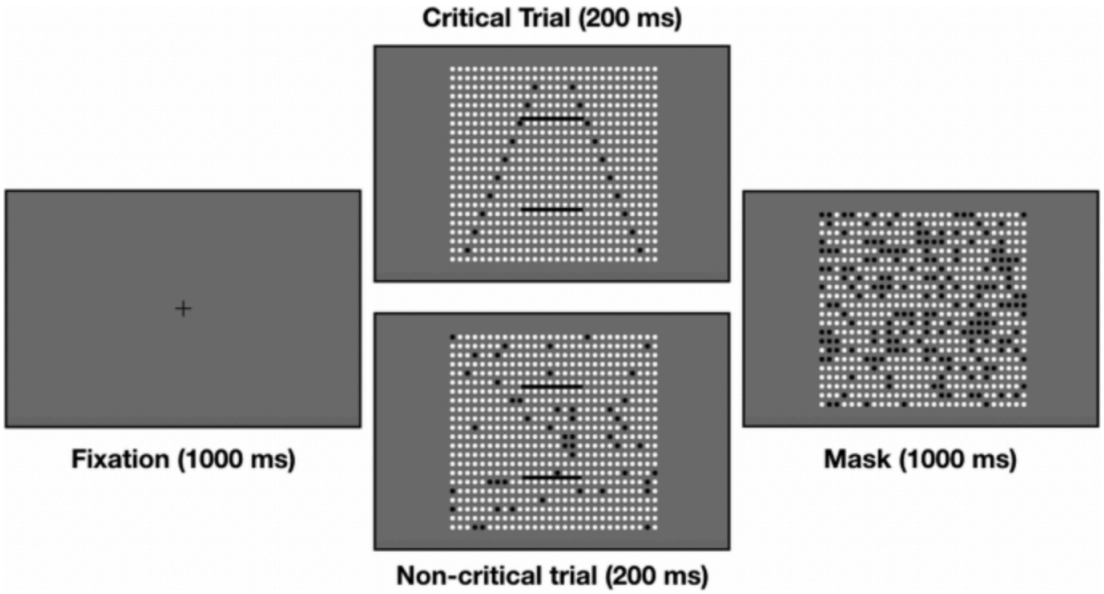
[20] Shurger et al 2008's study of GY, using a similar but arguably harder task, find no attentional advantage in accuracy with valid cuing, and only 54% accuracy across valid and invalid cuing. GY's attentional advantage in their study is in response time only. Be that as it may, we still retain some evidence of unconscious perception here, even in the case of invalid cuing.
By the way, in case you are worried about the paucity of subjects here, please bear in mind that the poor subject has to do a massive number of trials. And for a sample survey of a wider range of studies attempting to show attention without consciousness, including in neurotypical subjects, see Tsuchiya and Koch 2016: 75-78.

drawn away from the bar, and yet his unconscious perception of the bar's orientation survives. We therefore have evidence here of the presence of unconscious perception despite the absence of attention.[21]

Kentridge's experiments offer one source of evidence in favor of unconscious perception without attention. A further source of evidence comes from reviews of studies maintaining the presence of unconscious perception in cases of inattentional blindness. For one striking example, consider the sort of experiment performed by Moore and Egeth 1997, in effect replicated (with minor variations) by Wood and Simons 2019. Subjects are asked to give a verdict on which of two lines is longer, where those lines appear on a grid of dots. Usually the dots are random, but in some cases they form a pattern that induces a visual illusion affecting length perception (see the Fig. 1 from Wood and Simons 2019 below this paragraph). The subjects' verdicts of relative length end up corresponding to the relevant illusions, indicating that they did indeed perceive the illusion inducing dotted pattern. However, since they are unable to report the dotted pattern, their perception of the pattern seems to be unconscious. Now, since their attention is directed only towards the ordinary solid lines addressed by the experimental task, they seem in particular to have unconscious perception without attention of the illusion-inducing dotted pattern. Here we use the standard assumption of experiments on inattentional blindness that the subject's attention is occupied by the stimuli concerned by the central experimental task.

[21] Did GY perhaps have time to shift his attention back to the line in the cases of invalid cues? (Thank here to Heeyoon Choi). This seems unlikely, given the initial distraction of attention to a different location, and the brevity of the presence of the target for only 400 ms. In particular, the stimulus ramps up to peak contrast in the first 100ms, stays at peak contrast for 200ms, then ramps down for 100ms (as detailed on 2004: 832).

Fig. 1



Schematic of the procedure in Experiment 1. A fixation cross appears for 1,000 ms and is then replaced by the dot grid for 200 ms. On noncritical trials, the dots are random and the two lines differ in length. On critical trials, the dots form one of four possible illusions (two variants of the Ponzo illusion and two variants of the Müller-Lyer illusion) and the lines are of equal length. Immediately afterward, a random-dot mask appears for 1,000 ms

Now we seem to have unconscious perception of grouping in the absence of attention to the grouping. In general, many of the studies that purport to show that attention is necessary for conscious perception promise to also show that attention fails to be necessary for perception simpliciter, by revealing the persistence of unconscious perception despite the absence of attention. (For substantial further reviews of the evidence for the persistence of unconscious perception or at least of some perceptual processing in cases of inattentional blindness, see e.g. de Pontes Nobre et al 2020 or Kreitz et al 2020.)

Let's now say that there is unconscious perception outside attention. Can such perception provide justification for beliefs about the external world? Recall our earlier

turbochargings of the blindsighter CK. What we should do now is think through the previous range of epistemic boosts, this time assessing the powers of inattentive unconscious perception.

We can make our discussion concrete by working with Kentridge's paradigm of asking the subject about the orientation of a line when the subject has been given an invalid cue drawing their attention away from the line. We can start by imagining CK participating with inattentive superblindsight. Here he forms unprompted beliefs about the orientation of the line with a reliable degree of accuracy on the basis of his inattentive unconscious perception, and without any associated sense of forced choice guessing. We can then imagine CK being endowed in addition with inattentive superduperblindsight. Now he forms reliable metacognitive beliefs to the effect that he sees the orientation of the lines when he has inattentive unconscious perception of them. And we can even make it explicit that CK has metacognitive access not just to his perceptual states in isolation, but also to their role in the formation of his beliefs. Here CK forms reliable beliefs to the effect that he believes that the line is horizontal on the grounds that he saw a horizontal line.

Since CK now has enough to satisfy a wide range of views in epistemology, I take there to be reason in this case to hold that he is justified in believing that the line is horizontal. The argument for justification by unconscious perception smoothly transposes to the case of inattentive unconscious perception.

Considering some potential objections helps to bring out the strength of the strategy. Candidate sources of justification might be called into question by saying that they are not reliable, or mental, or not accessible. Or one might say that the subject's beliefs is not justified since the subjects feel like they are guessing. But all of these potential flaws have

been cleared away in our hypothetical cases. By building in so many epistemic advantages for CK, we have blocked most or potentially all sources of epistemic defects. The opponent risks having nothing other to say to impugn CK's source than that it isn't attentive or that it isn't conscious. This is in effect merely to re-assert their view. Here they would be in a corner, turning in a circle. (For discussion of further objections, I refer the reader back to our initial discussion of CK).

There is not much more I have to say specific to the case of inattentive unconscious perception. Our work has already largely been done through our elaborate stage setting. We have seen what it takes for there to be unconscious perception, and we have seen that it can justify. Likewise, we have seen that what it takes for there to be inattentive perception, and we have seen that it can justify. Inattentive unconscious perception has now entered the spotlight, and played its role of justifying CK's beliefs about the orientation of the unattended line. It is time for the closing curtains.

Conclusion

The debate about the epistemology of perception has been vast and long. But the debate has overwhelmingly been about whether and how conscious perception justifies our beliefs. Assuming that contemporary science is on the right track, conscious perception by no means exhausts the field of perception. We need to consider whether unconscious perception justifies beliefs, when it does so, and how it might do so. On the view I have defended here, unconscious perception does justify beliefs, and it does so without the mediation of attention. Unconscious perception without attention is just one more case of a

(frequently) unused epistemic asset.

Given the comparative scarcity of discussion of unconscious perception, and especially of *how* unconscious perception justifies if it justifies at all, the proper epistemology of perception has barely begun (although see Berger 2020 for a notable exception). Before closing I will sketch a few questions we should begin to consider.

One family of questions is local to unconscious perception, and broadly concerns *when* unconscious perception justifies. We have the categories of successful vision, illusion, and hallucination for conscious perception, and questions about when conscious perception justifies. Does conscious perception justify only in the good case of successful vision, or also in the case of illusion but not the case of hallucination, or across all three cases? We should be able to have a counterpart debate about unconscious perception, but first need to do some work to delineate the categories of illusion and hallucination for unconscious perception (Berger 2020 discusses the case of illusion). For example, assuming there can be unconscious imagery as allowed by figures such as Nanay 2023, what would account for the difference between hallucinatory blindsight and unconscious imagery, assuming there is indeed a difference?[22] Ultimately, we also need to be able to ask about the epistemic status of the perceiver with zero perceptual consciousness who is also a radically deceived brain in a vat! We need to be able to build skeptical scenarios that do not proceed through the duplication of conscious profiles, but rather somehow through the duplication of unconscious profiles.[23]

Another major question is broader and concerns whether we can have a uniform

[22] For some discussion of blindsight and imagery, see Michel et al 2025.
[23] See Byrne 2016 for discussion of how classic philosophical zombies differ in functional terms from ramped up cases of blindsight.

epistemology of perception. One possibility is that perception itself is the source of perceptual justification, never mind whether perception is conscious or not. Here we could have an entirely uniform epistemology of perception as such, one that describes and explains the epistemic powers of perception itself without any consideration of consciousness (for a hint at this sort of view, see the conclusion of Berger et al 2018, and see Burge 2003 for a worked out version of it).

My own view is that the blindsighter would acquire more perceptual justification if the lights were to come on, and that we should not expect conscious perception and unconscious perception to justify to the same degrees. While I do also think that consciousness itself is a source of the difference, this view is not yet guaranteed. Even if conscious perception and unconscious perception do justify to different degrees, there remains a question of whether they justify thanks to the same features or not. The question is whether conscious perception justifies is different from the question of whether it justifies in virtue of being conscious. It could turn out that conscious perception justifies beliefs not in virtue of being conscious, but rather in virtue of some feature that it shares with unconscious perception, simply having that feature to a higher degree (this is not my own view, but we need to consider it in our map of the space of options). My own view would be that consciousness itself makes a difference, and accounts for some or all of the presence of greater justification present when consciousness is present. How the fuller story will unfold remains to be seen---or perhaps we have seen it unconsciously already?

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