

## Consciousness, Attention, and Justification\*

### Introduction

Compare a subject who enjoys conscious visual experience of a ball, and a hypothetical blindsighted subject who does not have conscious visual experience of a ball, but who nevertheless registers the presence of a ball in unconscious perceptual processing. Across a range of cases, both subjects reliably form accurate judgments about whether a ball is present. Does the sighted subject have more reason to believe a ball is there? Or, in the terms we will use throughout this paper, does the sighted subject have more reason to believe that a ball is there? If the sighted subject does, the justificatory difference is presumably due to the conscious character of her experience, since the conscious and the unconscious perception are so similar in their other features.<sup>1</sup>

This position on the blindsight case is endorsed by *phenomenal approaches* in the epistemology of perception. According to phenomenal approaches, conscious perceptual experiences provide justification at least in part in virtue of their phenomenal character (Johnston 2006, Smithies 2011-a).<sup>2</sup> This view goes beyond holding, against Davidson (1986), that experiences justify beliefs. To say that experiences justify beliefs is not yet to say that they provide justification in virtue of their phenomenal character. They might instead provide justification solely in virtue of further properties which can be had in the absence of phenomenology (see Lyons 2009 and arguably Burge 2003).

To see the appeal of the phenomenal approach, it might help to put yourself in the shoes of the blindsighted subject, and in particular to suppose that your vision is restored. Wouldn't your epistemic position likewise seem to improve? Some readers may remain unmoved, but even they may want to assess which version of the view they oppose is the most plausible. Rather than attempting to settle the dispute here, we start from a point dialectically downstream.

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\* Thanks to audiences at the ANU, Arché, Brown, Cornell, Edinburgh, Fribourg, Geneva, Harvard, Haverford, Miami, the Northern Institute of Philosophy, and Urbana-Champaign. Thanks also to David Bennett, Ned Block, David Chalmers, Don Dulany, Martine Nida-Rümelin, Declan Smithies, Daniel Stoljar, Scott Sturgeon, Jonathan Vogel, Sebastian Watzl, Ralph Wedgwood, Elia Zardini, and an anonymous referee.

<sup>1</sup> One might protest that there are further differences between the sighted subject and the blindsighted subject which explain the epistemic difference between them.

For example, one might resist the idea that there is such a thing as unconscious perception, and explain the epistemic privilege of the sighted subject simply in terms of the fact that she sees a ball (for discussion of whether there is unconscious perception, see Merikle 2001 and Dretske 2006). To respond to this suggestion, we may compare the blindsighted subject with someone who has a perfect hallucination that a ball is present, with no indication that anything is amiss. Provided that such a subject has more justification than a blindsighted sighted subject to believe that a ball is present, consciousness without seeing does have an epistemic role to play after all.

<sup>2</sup> The crucial point is not just that they have some phenomenal character or the other, instead different experiences will justify different propositions in part in virtue of differences between their phenomenal characters. The point isn't merely that the "lights must be on" in the subject.

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Assuming that some phenomenal states play a constitutive role in justifying perceptual beliefs, which phenomenal states play this role?

We can refine this question by making a further comparison. When you imagined the sighted subject, you might well have imagined the sighted subject attending to the ball, in the way you are focusing your visual attention to this text right now. Think of attention here as a way of highlighting what you are experiencing. But now consider a distracted subject who enjoys conscious visual experience of a ball, without attending to the ball. Does the inattentive subject have any reason (or equivalently, any justification) to believe that a ball is there? According to the *Attention Needed* approach, she does not – roughly speaking, only consciousness inside attention supplies justification, so the distracted subject is epistemically on a par with a blindsighted subject with respect to the presence of the ball. According to the *Attention Optional* approach, she might well do – roughly speaking, consciousness outside attention sometimes supplies justification, so the distracted subject may have more justification than the blindsighted subject to believe the ball is present. (We will further clarify what kind of attention figures in these positions in section 1).<sup>3</sup>

We have formulated the Attention Needed and Attention Optional views with respect to *propositional justification*, which is a matter of what one has reason to believe proposition, whether or not one has taken advantage of one's position so as to form what is known as a *doxastically justified* or equivalently, *well-founded* belief. To get the distinction in view, compare Holmes and Watson, who may both have reason to believe that the butler did it, even though only Holmes has taken proper advantage of the evidence in forming his belief that butler did it, whereas Watson has formed the same belief, but on the basis of the wrong reasons, or no reasons at all. We will talk interchangeably about *having reason* from experience, experience *providing reason*, and experience *providing propositional justification* for beliefs.

Our aim in this paper is to articulate and motivate the Attention Optional view, and to defend it from a range of robust objections. Our defense is neither complete nor conclusive. But it is worth exploring how viable the position is because of its wide ramifications. Perhaps its most important ramifications concern debates about “internalism” and “externalism” in epistemology. It is natural to think that, if one privileges the role of consciousness in epistemology with respect to what justifies perceptual beliefs, one will be as “internalist” as one could be. To privilege consciousness is after all to privilege the conscious point of view of the subject, and the conscious point of view of the subject might easily be presumed to be “internal”

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<sup>3</sup> We have formulated the debate as a dispute among those who agree that conscious experiences supply justification in virtue of their phenomenal character. However, a related question can be raised by those who allow unconscious perception to be a source of justification. Assuming that some blindsighted subjects are capable of perceptual attention, as is argued by Kentridge 2008--- is unconscious perception a source of justification only when it is itself attentive? We set that question aside in what follows, on the grounds that the presuppositions of the question---that unconscious perception sometimes justifies, that there is attentive unconscious perception---are more controversial than those of our own.

both in the sense of being mental and in the sense of being cognitively accessible to the subject.<sup>4</sup> The Attention Optional view complicates this picture in ways we describe at the end.

Other ramifications bear on internalist views in epistemology that fall under the headings of “dogmatism” (Pryor 2000, 2004) and “phenomenal conservatism” (Huemer 2001, 2007). According to these positions, consciousness suffices for justification---roughly, if one has an experience with the content that *p*, then one has justification from the experience to believe that *p*. However, if attention is necessary for an experience to justify a belief, although not necessary for consciousness, we will then have cases in which one does have an experience with the content that *p*, although one fails to gain justification from the experience to believe that *p*. Here we have a new objection to views on which consciousness suffices for justification that isn’t addressed by extant responses to them.<sup>5</sup> The debate between the Attention Optional and Attention Necessary views brings this objection into focus.

Finally, in evaluating the Attention Optional view, we explore the epistemic significance of change blindness and inattentive blindness, psychological phenomena in which perceivers strikingly fail to notice large-scale changes in scenes (such as a swap of one interlocutor for another) or unexpected stimuli (such as a person in a gorilla suit).<sup>6</sup> Most discussions of inattentive blindness and change blindness concern the scope of conscious awareness. Are we conscious only of that to which we attend? Why do some blatant changes in the visual scene escape our notice? Is having a sense of being conscious of a rich range of detail in a scene always a “grand illusion”? The experiments designed to probe these questions (by Rensink 1997 or Simons and Chabris 1999) are among the most widely discussed in vision science, but their bearing on the epistemology of perception has been discussed much less.<sup>7</sup> In this paper we focus on a central epistemological question raised by these findings: what is the rational role of consciousness outside attention, if there is any?

The Attention Optional view assumes there is such a thing as a largely or wholly inattentive conscious experience. In section 1 of the paper, we clarify and defend this assumption. In section 2, after presenting some considerations favoring the Attention Optional view, we address a series of epistemological challenges. At the end, we return to the wider implications of the Attention Optional view.

## 1. Does Consciousness Require Attention?

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<sup>4</sup> For further discussion of different versions of internalism, see Conee and Feldman 2001, Pryor 2001, Wedgwood 2002.

<sup>5</sup> The views of Pryor and Huemer are typically stated with the caveat that an experience provides justification only in the absence of defeating evidence. So their proponent might say that, when you have an experience of something while failing to attend to it, you have defeating evidence. However, one arguably can fail to attend while lacking evidence that one fails to attend. For more on the question of defeat, see the end of section 2.

<sup>6</sup> For discussion of the aesthetic significance of these phenomena, see Silins ms1.

<sup>7</sup> Earlier discussion of the role of attention in epistemology include Campbell 2002/2011, Mole 2008/2011, Smithies 2011a/2011b, Roessler 2011, and Dickie 2011. These discussions focus primarily on the epistemic role of attentive experiences, not on the epistemic role of inattentive experiences.

## 1.1. Formulations

Are you conscious only of that to which you attend? According to what we call the *Highlight view*, the answer is No -- you sometimes experience more entities than those to which you attend (be they objects, properties, or other entities still). According what we call the *Searchlight view*, the answer is Yes -- just as you might see only those things illuminated by a searchlight, you experience only those entities to which you attend.

The simplest version of these positions would employ a binary notion of attention, according to which one either attends to something or one doesn't, where this is not a matter of degree. However, attention seems to come in degrees. To get a handle on the difference between degrees of attention, consider the conception of attention as a kind of highlighting, and consider how you might highlight words on a page in different colors of varying degrees of salience, ranging say from bright red to pale yellow. Degrees of attention co-vary with the degrees of salience of what one attends to.<sup>8</sup>

We are mainly interested in what happens in the low range. It has proven difficult to differentiate experimentally between low levels of attention and complete absence of attention.<sup>9</sup> For convenience, we will speak of "consciousness outside attention" and "inattentive experiences" as shorthand for conscious states (experiences) that are largely or wholly inattentive. The theses of interest to us can all be formulated in terms of experiences that are inattentive in this sense. They are in particular as follows:

**Spotlight View:** One is conscious of x only if one attends to x to more than a low degree.

**Highlight View:** One is sometimes conscious of x even if one either does not attend to x at all, or attends to x only to a low degree.

**Attention Needed:** One has reason from an experience to believe that x is F only if one attends to x to more than a low degree.

**Attention Optional:** One sometimes has reason from an experience to believe that x is F even if one either does not attend to x at all, or attends to x only to a low degree.

It is *prima facie* plausible that there is consciousness outside attention, in the sense we have in mind. For example, you might feel stiffness in your knees while jogging but not attend to it, being distracted by the music you are listening to. It might be hard here to rule out the possibility that you attended to a low degree to the stiffness in your knees, but we are not trying to rule out such a possibility. Or you might hear a drill in the background for a period of time without noticing it, then attend to the sound and realize you have been hearing it all along (Block 1995). Finally, while rummaging through the fridge, distracted by inner ruminations but looking for mustard, you might pass the mustard by even though you were looking straight at it. Later on, even though you did not attend to it, you might still (accurately) remember having seen it (Soltis 1966, Dretske 1969, Martin 1992, Smithies 2011-a).

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<sup>8</sup> Thanks to Declan Smithies for discussion of this point.

<sup>9</sup> Koch and Tsuchiya (2006) address this difficulty.

## **1.2. Motivations: Why the Searchlight View should not be taken for granted**

The classic inattention blindness experiments such as those by Simons and Chabris 1999 or Most et al 2001 are often thought to provide decisive support for the Searchlight view. But there are reasons to doubt that these cases ultimately provide much support.

The studies involve subjects who fail to report seeing a surprising stimulus that appears while they are performing an attentionally demanding task. Some subjects even deny seeing the anomalous stimulus when asked about it afterward. In the case of Simons and Chabris 1999, a significant proportion of subjects asked to count passes of a basketball failed to report seeing a gorilla who wandered into the scene of players. In the case of Most et al 2001, a significant proportion of subjects asked to track white or black shapes bouncing around a screen failed to report seeing a cross which traveled across the screen, even when the cross was red.

The searchlight view explains why the subjects did not report the unexpected stimulus with three key claims. First, since the subjects' attention was occupied by the difficult task to be performed, the subjects did not attend to the surprising stimulus (if they did attend to the stimulus, the Searchlight view would be of no use in explaining the failure to report). Second, since the subjects did not attend to the stimulus, they did not experience the stimulus. Finally, since the subjects did not experience the stimulus, they did not report the stimulus. The absence of report is explained by an absence of experience, which is in turn explained by the absence of attention.

This explanation is not more plausible than several other alternatives. A first alternative is that attention to  $x$  is necessary for one to report  $x$ , even though attention is not necessary for one to experience  $x$  (see Block 1995 and 2007 for discussion). On this approach, even if a subject did inattentively experience the gorilla or the red cross (even *as being* a gorilla or *as being* a red cross), we should still expect them to fail to report. On this line of thought, attention is necessary for you to form a belief which takes your experience at face value---the story still allows that you might have a memory about something you did not at the time register in belief, as you might in the case of the missing mustard.

Another alternative is that subjects who did not attend to the gorilla or the red cross experienced the region containing them as being continuous in color or texture with the background. On this line of thought, they did inattentively experience the region where the surprising stimulus is located, but did not experience the actual contents of the region, but instead "filled in" the region in their experience. No surprise then if the subject fails to report a gorilla or a red cross. In order for the case for the Searchlight view to succeed, such rival explanations must be blocked. These explanations would underwrite the Highlight View.<sup>10</sup>

## **2. What is the rational role of inattentive experiences?**

### **2.1. The Case for the Attention Optional view**

Suppose you walk into your kitchen and see a pomegranate on the counter. If you

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<sup>10</sup> For further discussion of these and other options available to the Highlight theorist, see Schwitzgebel 2007, Stazicker 2011, or Smithies 2011a.

know what pomegranates look like, then normally you would form the belief that there is a pomegranate on the counter. Of course, under some conditions, you would not form this belief, even if you had the same experience in which the pomegranate looks the way pomegranates typically look. You might not recognize it as a pomegranate, for instance, perhaps because you don't have the concept of pomegranates. Or you might have the concept and be good at recognizing pomegranates, but fail to form the belief because you unreasonably think you are hallucinating or seeing incorrectly. We could see any of these situations as cases in which you have an epistemic asset - your visual experience - that you don't use in forming a belief that a pomegranate is on the counter.

The Attention Needed and Attention Optional views can agree that normally, when you attend to a pomegranate on the counter, if you lack doubts about the reliability of your experience, and have the requisite concepts and the capacity to recognize pomegranates, you take the experience at face value and form a belief on the basis of your experience that a pomegranate is on the counter. If you lack the pomegranate concept, or can't recognize them, or unreasonably doubt the reliability of your experience, your experience will be an unused epistemic asset: something that contributes to your justification for believing that a pomegranate is on the counter, but which you don't use because of your doubts or your cognitive limitations.

The Attention Optional view allows for a different kind of unused epistemic asset. A subject with an inattentive experience of a pomegranate might have the concept of pomegranates, and a capacity to recognize them, and even believe that her experience is reliable, but still fail to use the inattentive part of her experience. Here it differs from the Attention Needed view, which says that you only ever have reason from experience when the experience is attentive, and disallows your inattentive experiences to count as unused epistemic asset of this kind. The two views can agree that normally, when your experience is attentive, if you have the relevant concepts and recognitional dispositions and you believe you experience is reliable, you will use the experience as a basis for a perceptual belief. But they differ on what happens to the status of that experience as an epistemic asset, when the experience is inattentive but the rest of the conditions just listed are met.

There are several important precedents for the scenarios allowed by the Attention Optional view, which we will present in increasing proximity to the perceptual case. Given how closely analogous these cases are to and the scenarios allowed by the Attention Optional view, we take them to provide some support for the Attention Optional view.

First, in the case of belief and inference, you can easily have reason to believe that p, without having noticed or taken advantage of the position you are in. For instance, if I have a justified belief that I have an appointment with x alone at noon, a justified belief that I have an appointment with y alone at noon, and a justified belief that  $x \neq y$ , then I'll have reason to believe that I have conflicting appointments, whether or not I have noticed the conflict. Indeed, that is why I kick myself once I see x and y together at my door--I failed to take advantage of the good epistemic position I was in. This is a case of *inferential blindness*, a cognitive analogue of what is allowed by the Attention Optional view. Given that inferential blindness is possible and indeed

common in the case of belief, we should expect analogous scenarios to be possible in the case of experience.

There is already precedent for unnoticed justification from experience in humdrum cases of “change blindness” of the sort discussed by Dretske 2004 and 2006. Suppose you have mocked your friend Moe’s moustache for years, and then one day Moe comes up to you asks, “do I look different?”. Even though you will most likely say “yes”, having just received a clue that he looks different, you still could easily have scanned his face and failed to notice that he shaved off his moustache. In such cases you fail to notice quite large-scale differences in a person’s appearance.

Does your experience give you reason to believe that Moe shaved? First consider what your experience was like. Either you experienced the region under Moe’s nose or you did not. We take the option that there was simply a gap in your experience to be absurd – you might well even have attended to the region, thereby satisfying the demands of the view that attention is necessary for consciousness. If you experienced the region under his nose, either you experienced it accurately or inaccurately. If you experienced it inaccurately, your experience would have “filled in” the appearance of a moustache under his nose. The filling-in view suggests that at least sometimes, we will experience the disappearance of the objects we expected to see, upon finding that those objects are not there. Since this suggestion seems dubious, we take it you had an accurate experience of the now hairless region under his nose.

When Moe points out to you that he shaved off his moustache, you may legitimately kick yourself for having failed to notice the difference. In such a case, we take it you kick yourself because you had reason from your experience to believe that Moe has no moustache, even though you failed to take advantage of the resource you had in forming a belief that his moustache is gone. Such examples of change blindness are ones in which your experience gives you reason to believe that p, even though you fail to take advantage of your experience so as to form a justified belief that p. Given that such cases are possible, we should expect cases of consciousness outside attention to likewise sometimes give you reason to believe that p, even if you fail to notice that your consciousness outside attention gives you reason to believe that p, and even if you otherwise failed to take advantage of the resource you have.

In the cases discussed so far, a source gives you non-immediate justification, in the sense that the source provides justification only when combined with your having reason to hold other beliefs. For instance, to have reason from your experience to believe that Moe shaved, your experience of the moustacheless upper lip has to combine with your reasons to believe that Moe had a moustache. In response, one might demand an example in which an experience gives one immediate justification, in a way that does not depend on your justification for other beliefs. After all, we should agree that an experience can give one non-immediate justification to believe many things, without one’s actually forming all the beliefs which are justified by the experience. My experience of the size of a doorway might justify me in believing that a Mack Truck wouldn’t fit through, that a Boeing wouldn’t fit through, that an Airbus wouldn’t fit through, and so on, even if I don’t form all of those beliefs.

Be that as it may, we can simply adapt the Moe example to make the point. Simply consider a belief about the color of skin under Moe’s nose. (And if you think there are no good candidates for immediate justification, the original example of the belief that Moe has shaved his moustache should work well enough).

The cases just described parallel the predictions of the Attention Optional view. The similarity between what the view allows and what occurs in the cases of inferential blindness and of change blindness gives us some reason to believe the view.

As a final consideration in favor of the Attention Optional view, compare a blindsighted subject who registers the presence of a ball, and a corresponding sighted yet distracted subject who experiences the presence of a ball. If you are inclined to judge that the sighted subject has more justification to believe that a ball is present, despite being distracted, you already see some appeal to the Attention Optional view.<sup>11</sup>

## 2.2 Challenges to the Attention Optional view

We now turn to some powerful objections to the Attention Optional view which use the inattentive blindness experiment by Most et al as a point of focus. In the experiment, subjects are asked to count the number of times white boxes bounce off the edges of a screen, while a red cross passes along the middle of the screen. We assume for the sake of argument that the subject experiences the red cross without attending to it, and moreover experiences the red cross as a red cross without attending to it.<sup>12</sup> In principle the discussion could easily be set up in other ways. For example, if the subject experiences the region where the red cross is located, but simply as being uniform in color with the rest of the background, we could then frame the discussion around whether the subject has justification to believe that the region is grey. Indeed, our discussion could be set around any example where the proponent of the Attention Optional view thinks we get justification from an inattentive experience. The red cross example is simply vivid and convenient.

A proponent of the Attention Optional view says that the subject has reason to believe that a red cross is on the screen, despite her lack of attention to the red cross. A first challenge to this position starts from the fact that the subject would not report experiencing a red cross, and might indeed deny experiencing a red cross. You might yourself have been experiencing a red cross to your lower right a moment ago. The challenge is then that forming a belief that a red cross is on the screen might seem to be no more than a stab in the dark, even from the point of view of the subject. On this line of thought, the Attention Optional position extends justification too far beyond what is inside the subject's point of view, wrongly counting beliefs as justified when they are no better than unjustified guesses.

In response, we appeal to the distinction between having reason to believe P, and using what reason one has for P to believe P. Insofar as Holmes and Watson each have good evidence that the butler did it, they each have reason to believe that the butler did it. Still, if only Holmes

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<sup>11</sup> For a defense of this claim, see Smithies (2011a and 2011b). For defense of a contrary claim, see Roessler (2011: 287-9). To defend Attention Optional, one might conjoin a case for the Highlight view with a case for the strong "dogmatist" claim that, if one has an experience with the content that p, then one has prima facie justification to believe that p (endorsed by philosophers such as Pryor and Huemer). Since the dogmatist claim is so controversial, we set that line of argument aside.

<sup>12</sup> We assume that, in order for an experience of a red cross to supply justification to believe that a red cross is present, one must experience the red cross as a red cross. It won't be enough to experience a cross that in fact is red, but misperceive it as being orange.



has properly based his belief on the basis of the evidence, whereas Watson has bypassed the evidence and formed a belief solely due to prejudice, only Holmes will have a well-founded belief that the butler did it.

If the Most et al. subject formed a belief that a red cross is on the screen without attending to the cross, her belief might well fail to be well-founded. But this does not mean that she fails to have reason from her experience for the belief. Attention might merely be a standard conduit through which we exploit the reasons we acquire from experience, so as to form a well-founded belief. (Is attention actually required to form a well-founded belief on the basis of experience? More on that soon.) Attention can play this role, without being a necessary condition for one to have reason from one's experience in the first place.

A second challenge draws on the idea that attention inevitably alters your experience. According to this position, rather than being a mere pointer, the "index finger of the mind", attention always transforms the course of your experience, and these transformations would always get in the way of your having reason from an inattentive experience for a belief. Here is one way to develop this line of thought:

**Usability:** An experience E gives you reason to believe that a is F only if you can form a well-founded belief that a is F on the basis of E.

**WF-Attention Needed:** If at time t you form a well-founded belief that a is F on the basis of an experience E, then at t you have E and attend to a.

**Attention Alters Appearance:** If you have an inattentive experience E of a, and then attend to a, then you no longer have E.<sup>13</sup>

**Conclusion 1:** You can't form a well-founded belief that a is F on the basis of an inattentive experience of a.

**Conclusion 2:** No inattentive experience ever gives you reason to believe that a is F.

On this line of thought, since you must use attention to form a belief on the basis of an experience, and you form a belief on the basis of an experience only if you have the experience during the time of the belief formation, you cannot use inattentive experiences to form well-founded beliefs. On the assumption that Usability is correct, inattentive experiences do not even so much as provide propositional justification. We scrutinize Usability more closely in what follows, examining both the case for it and the case against it. But first, let us focus on WF-Attention Needed.<sup>14</sup>

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<sup>13</sup> Cf Carrasco (2004) which discusses cases in which apparent contrast among the stripes on a patch (called a Gabor patch) varies with changes in attention. The principle says that this type of result generalizes to all changes in attention.

<sup>14</sup> Smithies 2011b defends WF-Attention Needed. He writes that experiences plays a role in "*formatting* the contents of experience in such a way as to make them available for use in conceptual thought. In particular, attention to an object is necessary for converting the contents of experience into the contents of justified belief (26)." Similarly, Mole (2008) suggests that "it is only after attention is paid that this awareness gives one a conceptually structured representation of the sort that improves one's epistemic position vis a vis the stimuli in a change blindness experiment" (96-7).

Whether or not attention is typically a conduit by which we form well-founded perceptual beliefs, we doubt that attention is a strictly necessary condition for well-founded perceptual beliefs. Here is a range of problem cases for that claim.

Consider a distracted subject navigating the environment, such as a distracted driver, or a walker lost in thought. Such a subject can still adjust their behavior in response to the environment in a way that is not merely instinctive, operating the brake, the clutch, the defrosting system, the steering wheel, and so on. Further, they arguably can do so while remaining distracted from the environment, without their attention being captured by the obstacles that they are successfully avoiding, or by the equipment that they are manipulating. Despite being superficially automatic, such behavior is far from being a mere reflex, and has a strong claim to being rational. In addition, the subject would satisfy the central diagnostics for having various beliefs about her immediate situation, such as the belief that the car is running and operating as it should be. They are disposed to endorse this proposition if asked, and they are acting in a way that would be advisable, given their desire to continue driving, if the proposition is true. In such a case, their inattentive experience is feeding into well-founded perceptual beliefs.<sup>15</sup>

Second, consider George, who has a sponge-like mind akin to a Google Street View camera. As George navigates his environment, he soaks up information about the background of his experience, outside of the foreground he attends to, and he can reliably answer questions about the background later. If you ask him what is at 204 Cayuga Street or at 538 Merrill Street, he can tell you, having recorded this information from his experience. We take it that such a subject's beliefs can be justified. (Notice that both reliabilist theories and broadly internalist theories can agree on this point. George's inattentive experiences are reliable, as well as constituting part of his point of view on the world.)

A difficulty for this line of argument is that, even if it works against the current version of WF-Attention Needed, it does not address a version of the claim restricted to minds like ours. And a version of WF-Attention Needed restricted in such a way could be enough to get to the conclusion that in minds like ours, inattentive experiences do not provide reason for beliefs.

For what we take to be the strongest line of objection to WF-Attention Needed, reconsider the classic putative examples of consciousness without a (high degree of) attention. When I have an experience of cufflinks without attending to them or noticing them, but later remember that I had an experience of cufflinks, that is a case in which I end up forming a well-founded belief on the basis of an experience. However, here I form a well-founded belief at *t* on the basis of an experience I do not have at *t*. The example is thus a counterexample to WF-Attention Needed.

In response to such examples, one might propose relaxing WF-Attention Needed, so that one need not have an experience at the time at which one forms a belief on its basis. However, if the claim is relaxed in this way, it is then no longer clear why one could not form a belief on the basis of an experience that has been destroyed due to its alteration by attention. Even if the experience is no longer around, that need not stand in the way of one's forming a well-founded

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<sup>15</sup> Some superficially similar cases might be psychologically different. A distracted driver might have no conscious experience at all, yet still make adjustments in response to unconscious perceptual inputs, in the manner of a zombie. Here we are taking for granted that the driver has an inattentive experience, and arguing that it can rationally guide behavior.

belief on its basis. To get a valid argument against the Attention Optional view, the original, stronger version of WF-Attention Needed is required. And that stronger version of the claim is false.

Our doubt that attention is necessary for well-founded belief does raise a worry about our overall position. If attention isn't necessary for well-founded belief, how are we to explain why many subjects fail to report the unexpected objects in cases of "inattention blindness"?<sup>16</sup> Our picture allows that you can form a justified belief that something is present without the intervention of attention, and thus our position allows that you can form a belief on the basis of an inattentive experience. But then why should inattention to the red cross stand in the way of forming a belief that one is there, and thus reporting that one is there? One simple suggestion we mentioned earlier was that "attention is the gateway to reporting" – one reports only those perceived entities one attends to, and those subjects who failed to report the red cross failed to do so because they failed to attend to the red cross. The simple suggestion is not available to our approach, however, once we allow that subjects form well-founded beliefs about what is present without attention.

In reply, we can explain why some experiences are not reported by appealing to the irrelevance of attended objects to the task the subject is performing. In the case of the red cross, the presence of the red cross is irrelevant to the action of counting bounces of white shapes. It is thus natural to expect subjects who experience the red cross without attending to it to be less likely to report the red cross. We can allow for a close connection between attention and the likelihood for the formation of well-founded beliefs without saying that attention is necessary for the formation of a well-founded belief.<sup>17</sup>

For all we have said so far, it might be that the Most et al subject simply cannot form a well-founded belief that a red cross is present without attending to the red cross. A third challenge departs from this idea, and foregrounds the thesis that we must always be able to use the reasons we have:

**Can't:** The Most et al subject cannot form a well-founded belief that a red cross is present on the basis of her inattentive experience of the red cross.

**Usability:** An experience E gives you reason to believe that p only if you can form a well-founded belief that p on the basis of E.

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<sup>16</sup> Recall that we did not have to assume that subjects ever have an inattentive experience of the red cross as such. We could work equally well with the assumption that subjects at most experience the region where the cross is located as uniform with the rest of the background. The question would then be whether their inattentive experience of that location provides them with propositional justification to believe that it is grey.

<sup>17</sup> Even if irrelevance of objects to a task helps explain why experiences of those objects go unreported, relevance to a task is no guarantee for an object to be attended. In studies reported by Fischer (1980), test pilots in flight simulators unwittingly fly planes into large obstacles that they fail to notice on the simulated runway. And a further possibility is that in the inattention blindness studies, some subjects report objects without attending to them. For further discussion, see Silins ms2.

**Conclusion:** The Most et al subject does not have reason to believe that the red cross is present on the basis of her inattentive experience of the red cross.<sup>18</sup>

The term “can” is notoriously slippery, and much depends here on how it is read. If a subject sometimes “can” do something just by having a suitable idealization who does it, then (Can’t) might turn out to be false. An idealized version of oneself, someone with a greater ability to take in the richness of one’s experience in judgment, is able to form a justified belief about which colored shapes are present on the basis of the Most et al experience. To give the argument the best chance, we will start by working with interpretations of “can” on which the (Can’t) thesis is true.

To evaluate the argument, we now turn to the question of how one might defend the Usability thesis.

A first defense of Usability draws on a version of the principle “ought implies can”.

**PJ Implies O:** You have propositional justification from an experience E to believe that p only if you ought to believe that p on the basis of E.

**Ought Implies Can:** If you ought to believe that p on the basis of an experience E, then you can form a well-founded belief that p on the basis of E.

**Conclusion (=Usability):** An experience E gives you reason to believe that p only if you can form a well-founded belief that p on the basis of E.

This argument is open to the complaint that propositional justification is better understood in terms of permissions rather than obligations (if indeed in normative terms at all). On this line of thought, if one has a visual experience of something’s being red, and has reason to believe that something is red on the basis of the experience, one need not be under any obligation to believe that it is red. In favor of this line of thought, consider how demanding it would be to have to follow through and believe every proposition for which one has good evidence. As venerable and venerated as the Ought Implies Can principle might be, then, it might not support Usability even if it is true.<sup>19</sup>

Another way of defending the Usability thesis sets normativity aside, through the claim that well-founded belief is more fundamental than propositional justification. One might maintain that what it is to have propositional justification from a source is to have a route to a well-founded belief through that source (Turri 2010). It presumably then follows that one has propositional justification from a source only if one can form a well-founded belief using the source.

We set aside how one might defend such a view about the priority of well-founded belief. If it is developed in terms of non-idealized senses of “can”, counterexamples to the view quickly arise.

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<sup>18</sup> See Smithies 2011a for discussion of a related argument.

<sup>19</sup> For further discussion of the relation between evidence and obligation, see Leite 2007 and Schoenfield (ms).

We start with an example from Pryor (2001). If John was taught the wrong rules of statistical inference, and is incapable of thinking of better ones on his own, John can be blameless in believing that *p* without having reason to believe that *p*. Now, when John lacks reason to believe that *p*, he either has reason to believe that not-*p* or has justification to withhold judgment that *p*---we take it at least one of the attitudes is epistemically justified for him in this example. Given his ignorance and inability, however, John is not capable of forming any doxastically justified attitude with respect to the proposition that *p*, be it the attitude of disbelief or the attitude of withholding judgment. He is not capable of taking up any of these attitudes for the right reasons, and so it is beyond him to have a well-founded attitude here. The upshot is that he has propositional justification for an attitude even though he can't form that attitude in a justified way. The case is not a direct counterexample to (Usability), since that principle is formulated in terms of the attitude of perceptual belief, but we take the principle to be sound only if it holds equally well for doxastic attitudes generally.

For further examples in a similar vein, consider the extraordinary range of delusions that people can have. In the Capgras delusion, one believes that one's spouse has been replaced by an imposter. In the Cotard delusion, one believes that one is dead. We take it that in many cases of delusion a subject has an unjustified belief that *p*, with no ability to form a justified attitude with respect to the proposition that *p*, due to the delusion.

The structure of the cases is this. In order to be a case in which blamelessness fails to suffice for justification, the subject needs to be blameless in believing that *p*, while lacking reason to believe that *p*. However, the subject does have reason to take up a different attitude towards the proposition that *p*. For example, in the delusion cases, the subject has ample evidence and reason to believe that she or her spouse is alive. Or, if you think some sort of defeat of ordinary evidence has taken place, at a minimum the subject has justification to suspend judgment with respect to those questions. Now, if one is blameless in believing that *p*, one can do no better than one does---if one can do better, presumably one is at least partially blameworthy for what one does. So the deluded subject ends up having reason to take up an attitude on the basis of her evidence, without being able to form a justified attitude on the basis of her evidence. To deny that such cases are possible is to commit oneself to the claim that cognitive blamelessness is sufficient for epistemic justification. We assume that such a view is wrong.

In response to the sorts of cases described above, one might insist that there are readings of "can" on which (Usability) and related claims come out true, for instance if one is allowed to abstract away from the cognitive limitations of a subject so as to consider her idealized counterpart (cf. Turri 2010). Perhaps the argument against the Attention Optional view can be run with such a version of (Usability).

In reply, the objection faces a challenge: on any reading that makes (Usability) come out true, (Can't) seems to come out false. For instance, suppose we idealize the subject so that the subject can take advantage of whatever sources of propositional justification she has. (Can't) comes out false on this approach, since such an idealized counterpart of the Most et al subject can take up her experience in judgment.

In response to the challenge, one might try to draw more fine-grained distinctions among idealizations, perhaps distinguishing between idealizations that abstract away from limits on how much one can attend to, and idealizations that abstract away from a compulsion one has to

believe specific proposition. On this line of thought, different notions of propositional justification correspond to different kinds of idealization, so that one notion applies to the Most et al subject, and the other doesn't. Taking the suggestion to an extreme, a third kind of idealization abstracts away from the Capgras delusion, a fourth abstracts away from the Cotard delusion, with different notions of propositional justification corresponding to each of these as well.

But it does not seem theoretically fruitful to proliferate notions of propositional justification in this way. Among other things it would complicate epistemic accounting when we compare strength of justification across propositions. It seems more fruitful to consider a more generic idealization from inability to use what epistemic resources one has. But this sort of generic idealization, which promises to make (Usability) come out true, will make (Can't) false.

Ultimately we doubt that there is any reading of "can" on which (Usability) comes out true. Consider cases in which a source of justification cannot be used without being destroyed, where evidence is like vanishing ink.<sup>20</sup> If my mind is like a still pool, and I am conscious but not presently forming any beliefs, I presumably have reason to believe that I am not forming any beliefs. Still, starting to form a belief would destroy the state of mind that gives me reason to believe I am not forming any beliefs, so that I am unable to form a well-founded belief on its basis. Similarly, suppose I know that [if I do not believe that I am in brain state B, then I am in brain state B].<sup>21</sup> If I also know that I do not believe that I am in brain state B, here I would seem to have reason to believe that I am in brain state B, thanks to my knowledge of the validity of the following simple argument and my knowledge of its premises:

I do not believe I am in brain state B.

If I do not believe I am in brain state B, then I am in brain state B.

I am in brain state B.

If I attempt to exploit the epistemic position I am in, and form a belief that I am in brain state B, I will lose my reason to believe that I am in brain state B, since I will presumably lose my belief in the first premise of the argument. No matter what idealized version of me we consider, I won't be able to use the propositional justification I have.

Besides the arguments we have considered so far against the Attention Optional view, two further objections remain.

First, it is arguably routine for us to experience much more than we are capable of attending to, so that we routinely fail to exploit the position we are in, according to the Attention Optional view. Are we then routinely guilty of unjustified propositional attitudes?

In reply, one can have reason to believe that p, fail to believe that p, and still not have any unjustified attitude with respect to its being the case that p---one might fail to have any attitude at all with respect to its being the case that p.

Although one might always have justification either to believe that p, disbelieve that p, or to suspend judgment with respect to p (after considering p), one does not always take up at least

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<sup>20</sup> Discussion with Declan Smithies was helpful here.

<sup>21</sup> We base this example on a biconditional discussed by Conee 1987, Sorensen 1987, and Christensen 2010.

one of these attitudes with respect to a given proposition. In the Most et al case, subjects who do not report a red cross may have no attitude towards whether a red cross is present--the question does not arise. In daily life more generally, the Attention Optional view does not predict that we are rampantly guilty of unjustified suspensions of judgment, since we do not even suspend judgment with respect to those propositions the view allows us to have reason to believe.

The second objection asks us to consider a subject in the Most et al case who does suspend judgment with respect to whether a red cross is present. Attention Optional seems to predict that the subject is unjustified in suspending judgment, since that would appear to be a case of disrespecting perceptual evidence. Wouldn't it be implausible to say that her suspension of judgment is unjustified?<sup>22</sup>

A first line of response maintains that the subject is unjustified in suspending judgment. Recall the case in which you had reason to believe you had conflicting appointments, even though you did not notice the conflict. If you suspended judgment about whether you have conflicting appointments, you should kick yourself when you notice they conflict – your suspension of judgment was not justified. Likewise, in the case of change blindness, if you suspend judgment about whether Moe's appearance has changed, you should kick yourself when you notice that he has--your suspension of judgment was not justified. Given the similarity of these examples to ones in which one has reason from inattentive experiences, there is a case for saying that suspensions of judgment is unjustified in the case of inattentive experiences.

An opposing line of response accommodates the intuition that withholding judgment on whether a red cross appeared on the screen is epistemically appropriate, on the grounds that while the inattentive experience of the red cross provides defeasible propositional justification, that justification is defeated by evidence that you don't reliably form beliefs about unattended parts of the scene.<sup>23</sup>

Deciding between these options is difficult, as it requires a principled way to distinguish between cases in which propositional justification is defeated, making it epistemically appropriate to suspend judgment, and cases in which propositional justification is sustained but un-useable as a basis for any doxastic attitude at all. A similar pair of options arises in one of the problems under the heading of "the problem of the speckled hen". Suppose you have a look at a many-speckled hen passing through the yard (say with 19 speckles), with enough time for you to attend to each of its speckles, although not for you to count them. And suppose your experience

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<sup>22</sup> We focus on a subject who withholds judgment at the time of experiencing the red cross. (It is plain that if the subject forgets her experience, she is justified in withholding judgment after she ceases to have it).

<sup>23</sup> A further option would be to endorse a version of the "epistemically permissive" thesis that more than one doxastic attitude to a proposition can be justified for one at a time. On this line of thought, even though the Attention Optional view states that one has justification to believe that a red cross is present, the proponent of the view could still also coherently hold that one also has justification to withhold judgment about whether a red cross is present. (See White 2005 for relevant discussion).

takes a stand on exactly how many speckles the hen has.<sup>24</sup> Is enough in place for you to have reason to believe that it has 19 speckles? Given that the requirements of the Attention Needed view have been met, that view faces the same question.

A principled account of how to distinguish between the cases where perceptual or attentional limitations defeat propositional justification provided by experience, and cases where those same limitations simply make that justification unusable would apply to both the speckled hen case and the case of inattentive experience. We lean toward the view that the subject has unusable rather than defeated justification, on the grounds that if such justification were always defeated, it's not clear how it could be there to begin with.

## Conclusion

According to a traditional approach in epistemology, only "internal" factors supply justification. One might have thought that, as much as relevant glosses by epistemologists of the term "internal" might vary, conscious states will be "internal" on every relevant sense of the term. The distinction between the Attention Optional and Attention Needed views call this assumption into question.

Given that conscious experiences do (at least partially) constitute the conscious point of the view of the subject, there is at least one good sense of "internal" on which the Attention Optional view assigns a justificatory role to internal states, insofar as conscious states are "internal" simply in virtue of being conscious. However, we hope to have brought out several surprising ways in which one can privilege the conscious point of the view of the subject while still giving an important justificatory role to factors that are in other senses "external".

One novel sense in which the Attention Optional view assigns a role to "external" factors is by assigning a justificatory role to conscious states which are external . . . to attention! Compare two subjects participating in the Most et al shape-tracking task, where each attends to the same white shapes moving in the same ways. One inattentively experiences a red cross, the other inattentively experiences only a black background. Their overall conscious point of view is different, even though what they are given in attention is the same. According to the Attention Optional view, the subject who is conscious of the red cross might have reason to believe that a red cross is present while the other subject does not. The epistemic difference stems from the difference between their conscious points of view on the world, and it obtains despite the fact that their attentive point of view on the world is the same. Here the conscious experience of the red cross is "external" inasmuch as it is inattentive.

Indeed, our discussion brings out a sense of "external" on which being mental, conscious, and accessible are consistent with being "external". Suppose a distracted driver forms a well-founded belief on the basis of being conscious of a curve in the road, without having attended to it. The experience of the curve might have been accessible to the driver, even if the driver in fact did not access it. Still, there is a sense in which the justifier deserves the name "external", given that it is outside of attention.

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<sup>24</sup> For dispute, see Tye 2009. As Smithies forthcoming points out, even if Tye and others are right, the problem could be set up in terms of the representation of highly determinate colors or shapes rather than in terms of numerosity.



There are further affinities between the view we have developed and standard externalist views. In some cases of consciousness outside attention, a subject will have a certain experience, yet fail to be in a position to know or even justifiably believe that she is having that experience. Her experience will then be “inaccessible” to her in an important sense. One might have thought that a conscious source of justification will always be both mental and accessible, but the Attention Optional position entails that this thought is wrong. One upshot is a new divergence between “internalists” who privilege mentality, and “internalists” who privilege accessibility, in what might have been thought to be the uncontroversial case of conscious sources of justification. The Most et al case also raises the question of whether one must be able to take advantage of the epistemic position one is in. Here an experience might give one propositional justification to hold a belief even if one is incapable of forming a well-founded belief on the basis of the experience.

One important further issue concerns the sorts of mismatches a view allows between how much justification one has and how much justification one seems to have. Familiar externalist views such as reliabilism are notorious for allowing that one may have less justification for an ordinary belief than one seems to have, for example if one is radically deceived by an evil demon. The Attention Optional view suggests there are cases in which one has *more* justification for an ordinary belief than one seems to have, for example in the Most et al case.

Although the dispute between Attention Needed and Attention Optional view puts a new kind of pressure on internalism to specify the kinds of internal states that matter, it is not an in-house dispute among internalists. Both positions assume that conscious states can play a rational role in justifying beliefs, and in principle this idea could be incorporated into reliabilist theories as well as internalist ones. After all, neither view provides a sufficient condition for a conscious state to provide justification, and both allow that various further facts about the etiology of states might matter. Both views are friendly to forms of reliabilism that carve out a rational role for conscious experience, as well as to views which exclude one’s having perceptual justification in cases of hallucination or illusion, however reliable one’s perceptual states might be.

On the basis of comparing a blind-sighted subject with a sighted subject, one might accept the slogan that justification is provided by one’s conscious point of view. We hope to have brought out how little is settled by this slogan, and how much there is to be debated in its vicinity.

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