

# Perceptual rationality

- Acknowledgments: Farheen.

Everyone agrees that beliefs based on perceptual experiences can be rational or irrational. But in her book *The Rationality of Perception*, Susanna Siegel argues for the novel and intriguing conclusion that *perceptual experiences themselves* can be rational or irrational.<sup>1</sup> Call this the *perceptual rationality thesis*.

Siegel offers many strands of reasoning in support of the perceptual rationality thesis, but one central strand runs as follows. First, Siegel argues that perceptual experiences can be formed via inferences. Siegel then suggests that emotions, much like beliefs, can be epistemically appraisable parts of the subject's outlook on the world. So, Siegel reasons, perceptual experiences can be formed via inferences that take these emotional outlooks as inputs. As a consequence, inferences can transmit irrationality from emotional outlooks to perceptual experiences themselves (§1-§2).<sup>2</sup>

Unsurprisingly, all of this has met with fierce resistance. For every part of Siegel's argument is highly controversial.

For one thing, Siegel's argument relies on the controversial claim that perceptual experiences can be the outputs of inferences. Now, perhaps this view might be amenable to *representationalists*, who think that perceptual experiences are just representations of a certain sort.<sup>3</sup> After all, on this view, it is at least *prima facie* reasonable to think that these perceptual

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<sup>1</sup> See, e.g., Siegel (2017, p. 15).

<sup>2</sup> I will later explain in detail why I interpret Siegel as advancing this argument.

<sup>3</sup> Seminal statements of the representationalist view can be found in Tye (1995); Dretske (1995). For more recent versions of representationalism, see Siegel (2010); Schellenberg (2018).

representations might be formed by inference. But it is a defining commitment of the popular *naïve realist* view that perceptual experiences are just instances of direct, non-representational awareness of the world.<sup>4</sup> And on this view, arguably perceptual experiences are just not the kinds of things that could possibly be formed through inference (§3).<sup>5</sup>

For another thing, Siegel's argument relies on the controversial claim that *emotions* can be inputs to inferences. Alan Millar has given a powerful argument against this claim. He suggests that if something is an inferential input, then its epistemic quality will be essential to fixing the epistemic quality of the inferential output. But, Millar claims, emotions do not meet this condition (§4).<sup>6</sup>

I do not know whether these objections are sound; there is much that Siegel can (and does) say in response. *But I think that neither of these objections matters.* For I believe that we can give a *much less controversial* argument – one that is similar in spirit to Siegel's, but that does not rely on either of the controversial claims flagged above – for the same conclusion. Better still, everything in this revised argument is compatible not only with representationalism, but also with naïve realism.<sup>7</sup> My aim in this paper is to lay out this much-improved argument (§5-§8) and to reveal a further important advantage of it (§9).

That said, in the spirit of honest inquiry I cannot commit fully to the perceptual rationality thesis. For many think that there is some special feature of perceptual experiences – perhaps that they are formed subpersonally, or that they are not adjustable via deliberation – that

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<sup>4</sup> For some especially influential statements of this view, see Campbell (2002); Martin (2002), (2004), (2006).

<sup>5</sup> See for example Brewer (2018, pp. 109-110). See also Millar (2018, p. 253), although Millar does not commit to naïve realism.

<sup>6</sup> See Millar (2018, pp. 255-257).

<sup>7</sup> That is not to say that her original argument is unsound; I remain neutral on that issue.

blocks them from being rationally appraisable.<sup>8</sup> If this line of resistance is warranted – and, truly, I just do not know whether it is – then even the improved argument fails (as does Siegel’s original argument).

Nevertheless, before I arrive at my final assessment of the perceptual rationality thesis, I find it worthwhile to construct the best argument for it that I can. I also find it worthwhile to see precisely which premises of this argument are strongest and which require further scrutiny. I hope that you will share these sentiments.

## 1. Siegel’s argument

A central conclusion of Siegel’s book, and the focus of this paper, is the following claim:

The *perceptual rationality thesis* (first pass): Perceptual experiences can be rational or irrational.<sup>9</sup>

Siegel’s argument for the perceptual rationality thesis spans the bulk of her book. It is not easily summarized. Indeed, I doubt that there is just one argument for that thesis; I suspect that there are many overlapping strands of argument for it.

Nevertheless, I think that I see one argument that is especially central to Siegel’s thinking. Here are some of Siegel’s own statements of the premises of this argument:

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<sup>8</sup> For these objections, see the contributions of Ori Beck and Alison Springle, respectively, to Siegel et al. (2018).

<sup>9</sup> This is half of a thesis that Siegel refers to as the *Rationality of Perception*. The other half of that thesis is that “the processes by which [perceptual experiences] arise can be rational or irrational” (Siegel 2017, p. 15).

- (1) "... fear has an outlook internal to it that consists in being confident, to some degree, that certain possibilities are pressing. This form of confidence can be epistemically appraised .... Fear itself can be reasonable or unreasonable." (2017, p. 151)
- (2) "Experiences can be formed by inferences ...." (2017, p. 107)
- (3) "We can now see how the outlook internal to fear, which is itself epistemically appraisable, can make perceptual experiences epistemically appraisable as well. I'll focus on cases in which the fear leads to unreasonable conclusions, starting with inferences that lead to judgments ... [and moving then to inferences that] lead to conclusions in the form of perceptual experiences." (2017, pp. 151-152)
- (4) "perceptual experiences ... can be rational or irrational." (2017, p. 15)

Here is my (mildly regimented) restatement of these quotations, in order:

Siegel's central argument – first pass:

- (R1) Emotions can be rationally appraisable parts of the subject's outlook.<sup>10</sup>
  - (R2) Perceptual experiences can be the outputs of inferences.
  - (R3) If emotions can be rationally appraisable parts of the subject's prior outlook and perceptual experiences can be the outputs of inferences, then there can be rational and irrational perceptual experiences.
  - (R4) There can be rational and irrational perceptual experiences.
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<sup>10</sup> (1) is restricted to fear in particular, but Siegel's arguments for (1) would obviously generalize.

This argument is deductively valid, and its conclusion, (R4), is simply the perceptual rationality thesis. So let us briefly consider Siegel's justifications for premises (R1)-(R3).

(R1) says that emotions can be rationally appraisable parts of the subject's *outlook*, where one's outlook is how one takes the world to be. Siegel's justification for this claim is that when we feel emotions, we might thereby treat certain possibilities as "live and pressing," in some relevant but difficult-to-specify sense.<sup>11</sup> For instance, when an acrophobic subject (call her Abby) stands on the balcony of a tall building, her fear might be partly constituted by her taking the possibility of falling to be live and pressing. This treatment of a possibility as live and pressing would then be part of the subject's outlook and would be rationally appraisable.

(R2) says that perceptual experiences can be the outputs of inferences. Siegel's defense of this claim is simply that "inferential routes to experience are not precluded either by the nature of inference ... or by the nature of experience ..." (2017, p. 107). Some readers will be puzzled by how this remark, even if it is true, would support (R2); more on that in the next section.

(R3) says that if emotions can be rationally appraisable parts of the subject's prior outlook and perceptual experiences can be formed by inference, then there can be rational and irrational perceptual experiences. Siegel's core idea here is that the rationality or irrationality of an emotional outlook can be transmitted, via inference, to the perceptual experience itself.<sup>12</sup> In addition, Siegel considers a long list of putative further conditions that a mental state/event must meet in order to be rationally assessable. These include: being phenomenologically active, being active with respect to reasoning, being something that can be formed by reflection, and being

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<sup>11</sup> See Siegel (2017, p. 150). Again, Siegel focuses on fear in particular, but presumably the argument would generalize.

<sup>12</sup> See especially Siegel (2017, ch. 6), which is tellingly entitled, "How experiences can lose power from inference."

rationality adjustable in response to criticism. For each such condition, Siegel claims either that perceptual experiences can meet it, or that some rationally assessable states fail to meet it, and so it is not a genuine condition for rational assessability.<sup>13</sup>

From these premises, Siegel concludes that there can be rational and irrational perceptual experiences.

## 2. Interpreting Siegel's argument

Every claim in Siegel's argument includes the word "can," and so it is crucial to understand what sort of possibility is under discussion here. Indeed, I will suggest that many of Siegel's readers – friends and opponents alike – have misunderstood what sort of possibility she is discussing, and so have failed to connect with her thesis. In particular, many of Siegel's readers take her to be discussing what is possible *for actual, ordinary human beings*, whereas I read her as discussing merely what is *metaphysically* possible.

Let us start with the reading of Siegel that I reject. It is motivated partly by the fact that, throughout her book, Siegel's focus is on cases that seem to be perfectly ordinary. One of her favorite cases is the case of Jill, a subject who perceptually takes her friend Jack to be angry, not because his face shows any signs of anger, but only because Jill was already afraid that Jack was angry. And another of Siegel's favorite cases is that of Vivek the vain performer, who always perceptually takes faces in the audience to be showing adoration, regardless of how those faces actually look. Siegel returns to these two cases time and again in her book. And this emphasis on ordinary cases can give the impression that the perceptual rationality thesis is a claim about what is possible *for actual, ordinary human beings, given our actual psychologies*.

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<sup>13</sup> Siegel (2017, pp. 31-38).

Moreover, the final section of Siegel’s book focuses on what appear to be politically urgent cases: for example, cases of police officers who misperceive tools in the hands of black subjects as weapons.<sup>14</sup> This reinforces the impression that Siegel is making claims about actual, ordinary human subjects.

And that is precisely how many of Siegel’s readers have understood her. For example, Alan Millar remarks, “I have been assuming that Siegel intends us to take the case of Jill as being of a familiar sort”; Brewer says that “Siegel’s general contention is that experiences *are* rationally evaluable”; Chirimuuta says that “Siegel’s position is that the process of forming perceptual experience *is* a kind of reasoning”; Samoilova says that according to Siegel, “perceptual experiences *are* just one more link in a string of mental states, not only with a future in the form of other mental states ... but also with a past rooted in other mental states” (all emphases mine).<sup>15</sup>

However, I believe that these interpretations are not correct. Siegel is not defending claims about our actual perceptual experiences. Instead, she is defending this much weaker claim:

The *perceptual rationality thesis* (final pass): It is metaphysically possible for there to be rational and irrational perceptual experiences.

An initial reason for reading Siegel in this way is that at various points Siegel makes it explicit that she is not making claims about actual human psychology. For example, in a recent pair of articles written after her book, Siegel clarifies that the perceptual rationality thesis “does not entail the empirical hypothesis that perceptual experiences are actually formed by inference.

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<sup>14</sup> Siegel (2017, p. 174).

<sup>15</sup> See, respectively, Millar (2018, p. 260); Brewer (2018, p. 107); Chirimuuta’s contribution to Siegel et al. (2018, p. 177).

It says that they could be so formed.”<sup>16</sup> Now, this certainly makes it sound like Siegel’s thesis concerns what is possible either epistemically or metaphysically.

But why think that Siegel has in mind metaphysical rather than epistemic possibility? Well, here is one reason. Recall the case of Jill, who perceptually takes her friend Jack to be angry only because Jill was already afraid that Jack was angry. In a symposium on her book, Siegel is at one point defending her claim that Jill’s perceptual experience is irrational against an objection. The objection is that Siegel simply *stipulates* that Jill is making an epistemic transition from her perceptual inputs and her background emotional state to a certain perceptual experience. Siegel replies, “Since Jill is a fictional character, there is no independent fact of the matter about what psychological mechanisms produce her experience.”<sup>17</sup>

This remark would be baffling if Siegel were defending a claim about what psychological mechanisms are *epistemically* possible. Such a claim would have to be defended partly by engaging with empirical evidence about actual human psychology. But Siegel’s remark makes perfect sense if we understand her to be defending a claim about what is *metaphysically* possible.

And there is a final reason, and to my mind the best one, for reading Siegel as defending a claim about metaphysical possibility. The reason is that conclusions about metaphysical possibility are all that her premises would support. For example, Siegel’s argument for the perceptual rationality thesis relies on the premise that perceptual experiences can be formed by inference. And Siegel summarizes her multi-chapter argument for this premise as follows:

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<sup>16</sup> Siegel et al. (2018, p. 179). Of course, in one sense Siegel’s remark is obviously true: the perceptual rationality thesis does not even say anything about inference, so of course it does not entail any empirical hypothesis about inference. Presumably what Siegel means, however, is that her *argument* for the perceptual rationality thesis does not entail any empirical hypothesis about inference.

<sup>17</sup> Siegel et al. (2018, p. 532).

“inferential routes to experience are not precluded either by the nature of inference (Chapter 5) or by the nature of experience (Chapter 3)” (p. 107).<sup>18</sup>

Now, this premise would be very poor support for the claim that any of our *actual* perceptual experiences are formed by inference. However, this premise would be excellent support for the claim that it is *metaphysically possible* for perceptual experiences to be formed by inference. Analogy: consider the (true) premise that there is nothing in the nature of pigs or in the nature of wings to prevent pigs from having wings. This premise is very poor support for the claim that there are any actual winged pigs, but it is excellent support for the claim that it is metaphysically possible for there to be winged pigs.

For these reasons – and building on the argument reconstruction from the previous section – I would express Siegel’s argument for the perceptual rationality thesis more precisely as follows:

Siegel’s central argument, final pass:

- (R1) It is metaphysically possible for emotions to be rationally appraisable parts of the subject’s outlook.
- (R2) It is metaphysically possible for perceptual experiences to be the outputs of inferences.
- (R3) If it is metaphysically possible for emotions to be rationally appraisable parts of the subject’s prior outlook and for perceptual experiences to be the outputs of inferences, then it is metaphysically possible for there to be rational and irrational perceptual experiences.

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<sup>18</sup> Siegel repeats this summary elsewhere: see Siegel et al. (2018, p. 176).

(R4) It is metaphysically possible for there to be rational and irrational perceptual experiences.

But wait – if Siegel is merely defending a conclusion about what is metaphysically possible, then why would she illustrate her ideas by using seemingly ordinary cases? I suggest that it is because she *hopes* that some actual cases are cases of rational and irrational perception, and she is illustrating why this hope is significant and worth testing empirically.

Still, this raises an obvious concern about the significance of Siegel's argument. No doubt there is some value in considering the epistemology of merely metaphysically possible perceivers, but what is most interesting is the epistemology of actual human perceivers. And if Siegel gives us no reason to think that her perceptual rationality thesis applies to us, then she gives us no reason to think that her epistemological project is nearly as interesting as it initially appeared to be. For example, return to Siegel's cases of police officers who misperceive tools in the hands of black subjects as weapons, which she analyzes as cases of perceptual irrationality. We have seen that Siegel's point is just that these police officers are *metaphysically possible*; she gives us little reason to think that their psychologies are anything like the psychologies of actual police officers. And that makes these cases much less germane than they initially appear to be.

This concern is, in my view, a serious one. And a further advantage of my argument below is that it greatly reduces (though it does not fully eliminate) this concern. For I will be arguing that it takes much less than Siegel has supposed for perceptual experiences to be rational or irrational, and that should at least *greatly increase* our credence that some actual perceptual experiences are rational or irrational.

### 3. An objection to (R2)

Now we have a firm understanding of what Siegel's argument says. What I want to do next is to highlight two important objections to her argument. Neither objection is decisive, but each one is powerful and will meet with acceptance from many quarters. So one of my central aims in this paper will be to give a new argument for the perceptual rationality thesis that circumvents both of these objections.

My goal in this section is to develop an important objection to:

(R2) It is metaphysically possible for perceptual experiences to be the outputs of inferences.

I will develop this objection from the perspective of the *naïve realist* – the theorist who holds that any perception is, by its nature, a primitive relation of direct, non-representational awareness to particulars and properties, typically ordinary ones.<sup>19</sup> Note that I will remain neutral on whether naïve realism is true. My point will just be that many naïve realists should reject (R2).

The idea behind (R2), recall, is that it is metaphysically possible for the subject's perceptual experience to be the output of an inference that begins with perceptual inputs, perhaps together with other elements of the subject's outlook. For instance, in Jill's case, the inputs to the inference might include her perceptions of the colors and shapes of Jack's facial features, and perhaps also Jill's fear. Jill then arrives at a final (and more complete, if you will) perceptual experience which includes her perceptual inputs but which also treats Jack as angry.<sup>20</sup>

Now, upon encountering this suggestion, the naïve realist might be tempted to object that it is metaphysically impossible for perceptions to be the *outputs* of inferences. For the naïve

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<sup>19</sup> For especially influential statements of the naïve realist view, see Campbell (2002); Martin (2002), (2004), (2006).

<sup>20</sup> See Siegel (2017, pp. 117-119).

realist holds that perception, by its nature, involves *direct* awareness of the world. In other words, perception, by its nature, involves an awareness of certain worldly things that is not grounded in awareness of anything wholly distinct from those worldly things.<sup>21</sup> But (R2) claims that it is metaphysically possible for perceptual experiences to be the outputs of inferences. And if it is metaphysically possible for perceptual experiences to be the outputs of inferences, then those experiences would not involve direct awareness of the world after all; they would instead involve an *indirect* awareness of the world that is based on the inputs to these inferences. So the naïve realist might be tempted to conclude that (R2) is false.

However, this argument is no good. In particular, the claim that it is metaphysically possible for perceptual experiences to be the outputs of inferences supports only the claim that it is metaphysically possible for perceptual experiences to involve some *indirect* awareness. But that is very different from the claim that it is metaphysically possible for perceptual experiences *not* to involve any *direct* awareness! To put the point in a different way, an inference might deliver a perceptual experience that consists of two things: first, an instance of direct, non-inferential awareness of the world (e.g., Jill's direct, non-inferential awareness of Jack's face); second, and partly inferentially based on that, an instance of indirect, inferential (apparent) awareness of the world (e.g., Jill's apparent awareness of Jack's emotional state).

However, there is a second and much more powerful way for the naïve realist to resist (R2). Again, (R2) is the claim that it is metaphysically possible for perceptual experiences to be the outputs of inference, and Siegel's thought is that the inputs to these inferences are also at least partly perceptual.

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<sup>21</sup> There are different ways of specifying the meaning of the expression "wholly distinct," but at the very least the properties of a particular are not wholly distinct from that particular itself.

The second line of resistance is for the naïve realist to say that perceptions cannot be *inputs* to inferences. For, according to the naïve realist, perceptions are non-representational: they do not have content, but rather just put us directly in touch with worldly entities such as objects, properties, and states of affairs. And it is eminently reasonable to think that such worldly entities – say, the desk that I see in front of me right now – cannot be inputs to inferences. After all, they seem to lack the right kind of structure: an inference could surely take as input the *proposition* that the desk exists, but it is hard to see how it could take as input *the desk itself*. If this reasoning is correct, then the naïve realist should conclude that it is metaphysically impossible for perceptions to be the outputs of personal-level inferences that take other perceptions as input. And, as far as I can tell, that is what naïve realists in fact tend to think.

This naïve realist thought is not quite inconsistent with (R2). For the naïve realist claim is about *perception* in particular, while (R2) is about *perceptual experience* more broadly. So it would be theoretically possible for a naïve realist to still accept (R2) by claiming that inferences cannot result in perceptions, but they can result in, e.g., hallucinations. And I do not doubt that at least a few naïve realists would be willing to say this, for while naïve realists are in broad agreement about the nature of perception, they tend to fragment on questions about the nature(s) of hallucination. But I am also sure that many naïve realists would not be willing to say this. And these naïve realists have strong reason to reject (R2).<sup>22</sup>

And things get worse for Siegel. For even those naïve realists who are willing to accept (R2) might still have reason to resist Siegel’s analysis of her two core cases. Recall that Siegel’s first core case is that of Jill, a subject who perceptually takes her friend Jack to be angry, not

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<sup>22</sup> Naïve realists have held that hallucinations are mental items that are not perceptions, but that are instead characterized by: being introspective indiscriminable from perceptions (Martin 2006); being perceptual representations (Logue 2012); being imaginative experiences (Allen 2014); or producing the same cognitive effects as veridical perceptions (Fish 2009).

because his face shows any signs of anger, but only because Jill was already afraid that Jack was angry. And Siegel's second core case is the case of Vivek the vain performer, who always perceptually takes faces in the audience to be showing adoration, regardless of how those faces actually look. Now, Jill and Vivek are not hallucinating; they are suffering from illusions. And many naïve realists classify illusions as perceptions<sup>23</sup> – which, again, naïve realists typically think cannot be formed by inference. So even when we restrict our attention to naïve realists who might accept (R2), many of those naïve realists would reject Siegel's claim that *the perceptual experiences of Jill and Vivek* are instances of (R2).

Let us recap. Siegel's argument for the perceptual rationality thesis relies on this premise:

(R2) It is metaphysically possible for perceptual experiences to be the outputs of inferences.

But many naïve realists will reject (R2) on the grounds that it is incompatible with certain facts about the natures of perceptual experiences. And many other naïve realists might be willing to accept (R2), while also thinking that (R2) applies *only* to hallucinations. But even these naïve realists will deny that (R2) applies to Siegel's core cases, which are not cases of hallucinations. So there are strong reasons for many naïve realists either to reject the perceptual rationality thesis, or to say that it does not apply to Siegel's core cases.

There are, of course, replies that Siegel might give. For example, she might argue that worldly entities can be inferential inputs, or she might just argue against naïve realism *in toto*. But I want to bypass these disputes. For I think that it makes no difference whether Siegel or

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<sup>23</sup> For discussion, see Byrne and Logue (2008) on VI/H disjunctivism.

certain of her naïve realist opponents are correct. There is a much less controversial argument for the perceptual rationality thesis, an argument that does not rely on (R2).

I will give that new argument soon, but let me first discuss another important objection to Siegel's original argument.

#### 4. An objection to (R1)

Now return to Siegel's first premise:

(R1) It is metaphysically possible for emotions to be rationally appraisable parts of the subject's outlook.

Recall that one's *outlook* is how one takes the world to be.

Premise (R1) is also highly controversial. For one thing, it is incompatible with at least one broad and popular theory of emotions: the *motivational theory*, which says that emotions are simply motivational states of a certain kind. According to this theory, any cognitive outlook is external to the emotion itself. Thus, any argument for the motivational theory will be an argument against (R1).<sup>24</sup>

This is not the place for a leisurely detour into the theory of emotions, however. To keep the discussion tractable, this section will focus solely on a trenchant objection – recently raised by Alan Millar – to Siegel's way of thinking about emotions.

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<sup>24</sup> For some recent defenses of motivational theories, see Deonna and Teroni (2012) and (2015); Scarantino (2014) and (2015).

Millar begins by noting that “A genuine input to an inference is something whose role is essential to fixing whether the inference is good.”<sup>25</sup> In other words, if something is a rationally appraisable input to an inference that results in a particular output, then the input is essential to fixing the epistemic quality of that output. With this idea in mind, return to the case of Jill, the subject who perceives Jack’s blank stare but – because she is afraid – perceptually takes Jack to be angry. On Siegel’s analysis of this case, Jill’s fear is a rationally appraisable input to an inference that results in Jill’s perceptual experience as of an angry face. So, if Siegel is correct, then Jill’s fear should be essential to fixing the epistemic quality of her perceptual experience.

But, Millar claims, *it is not*. All that matters is whether Jill is correctly responding to the perceived features of Jack’s face.<sup>26</sup> To appreciate this point, notice that we can vary the original case in two ways. First, we can imagine that Jill is not afraid at all, while holding fixed everything else about the original case. That is, we can imagine that Jill sees the blank stare on Jack’s face. But, for no good reason, she perceptually takes Jack’s face to be angry. This perceptual experience would seem to be just as irrational as the perceptual experience in the original case. Alternatively, we can imagine that Jill is just as afraid as before that Jack is angry. However, when she sees Jack’s face, she manages to correctly perceptually take it to be confused rather than angry. Even though Jill is afraid, this perceptual experience is epistemically excellent! Thus, Millar suggests, Jill’s fear does not play any essential role in fixing the epistemic quality of her experience.

Millar’s objection is *not* that Jill’s fear plays no role. Her fear might well *cause* her to make an epistemically bad categorization (or, in principle, an epistemically good one). For instance, her fear might cause her to wrongly discount the significance of some evidence and to wrongly exaggerate the significance of other evidence. But these are merely ways for Jill’s fear to be a

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<sup>25</sup> Millar (2018, p. 257).

<sup>26</sup> Ibid. Millar’s focus is not on Jill’s case but on other cases of fear. For ease of exposition, however, I am going to keep the focus on Jill’s case.

*causal factor* in her taking Jack to be angry. They are not ways for her fear to be a *rationaly appraisable input to an inference* whose output is her taking Jack to be angry. At least, so says Millar.

It is not immediately obvious which premise of Siegel's argument is targeted by Millar's objection. On reflection, however, I think that Millar's objection is best understood as targeting:

- (R1) It is metaphysically possible for emotions to be rationally appraisable parts of the subject's outlook.

For Millar's point, if it is a good one, would seem to generalize just as well to inferences that result in *beliefs*.

For example, suppose that Jill fears that Jack is angry, just as before. However, Jill never sees Jack's face; she instead receives some testimony about how Jack has been behaving recently. And suppose that Jill goes on to draw an inference about Jack's emotional state. If we accept Millar's original reasoning, then presumably we should also accept that Jill's fear is not a rationally appraisable input to this inference, either. For presumably we should say that the epistemic quality of Jill's belief about Jack's emotional state is fixed solely by the epistemic quality of her initial (mostly testimony-based) beliefs and the epistemic quality of her inference. And if Jill's fear cannot be epistemically relevant even to inferences such as these, then presumably that is the case because her fear cannot be part of her outlook.

Thus Millar has identified another important way to resist Siegel's argument for the perceptual rationality thesis.

I take Millar's objection to (R1) to be a powerful one. And I also take the naïve realist objection to (R2), discussed in the previous section, to be a powerful one. However, I will not

worry about whether these two objections are ultimately successful. For I think that it does not much matter. I will instead offer a new argument for the perceptual rationality thesis, an argument that bypasses both of these objections entirely.

## 5. A new argument: overview

Below is my new argument for the perceptual rationality thesis. Italics are used to flag the key departures from Siegel's argument:

- (R1\*) It is metaphysically possible for *beliefs* to be parts of the subject's prior outlook.
- (R2\*) It is metaphysically possible for *categorizations* to be epistemically appraisable and perceptual.
- (R3\*) If it is metaphysically possible for beliefs to be parts of the subject's prior outlook and for categorizations to be epistemically appraisable and perceptual, then it is metaphysically possible for there to be rational and irrational perceptual experiences.
- (R4\*) It is metaphysically possible for there to be rational and irrational perceptual experiences.

Let me defend the premises of this argument. Along the way, I will explain why these premises circumvent the objections raised above against Siegel's argument.

## 6. The new argument defended, part 1

Recall that Siegel's argument begins with this premise:

(R1) It is metaphysically possible for emotions to be parts of the subject's prior outlook.

But, as we have seen, Millar raises a trenchant objection that targets this premise. The objection is that the epistemic quality of a belief is never fixed by the subject's emotional state. It depends only on the epistemic quality of her evidence, which is independent of her emotional state. And the best explanation of this fact is that (R1) is false.

The first premise of my argument, by contrast, is this:

(R1\*) It is metaphysically possible for *beliefs* to be parts of the subject's prior outlook.

I do not see the need to offer an extended defense of this premise, for it is almost universally accepted.<sup>27</sup> And, of course, it avoids the extended version of Millar's objection. After all, nearly everyone agrees that the epistemic quality of a belief can be fixed in part by the epistemic quality of the further beliefs on which it is based.

## 7. The new argument defended, part 2

The next premise of the new argument is:

(R2\*) It is metaphysically possible for categorizations to be epistemically appraisable and perceptual.

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<sup>27</sup> It is, of course, possible to reject (R1\*) by being an eliminativist about belief, but I will set this concern aside.

What are categorizations? Well, when we perceive things, we often go on to apply *concepts* to those things. For example, when you look around your office, you might see books, papers, and pens, and if you do then you will likely go on to conceptualize these objects *as* books, papers, and pens. I am using verbs like *categorizing* to refer to this process of conceptualizing what we perceive, and I am using the noun *categorization* to refer to the result of such a process.

It is obvious that categorizations are at least sometimes epistemically appraisable. That is so *whether or not* we think of categorizations as the outputs of inferences. Of course, if we do think of categorizations as the outputs of inferences, then we will likely think of the epistemic quality of the categorization as fixed by the epistemic quality of the inferential inputs together with the epistemic quality of the inferential process.

But we might instead think of categorization as a non-inferential process of applying concepts to the worldly entities that we perceive.<sup>28</sup> And it would still remain plausible that categorizations would at least sometimes be epistemically appraisable. For example, suppose that I have a perfectly ordinary visual experience of a desk. If I go on to categorize the desk as a desk in the usual way, then my categorization deserves a positive epistemic appraisal of some kind. But if for some bizarre reason I go on to categorize the desk as a zebra, then my categorization deserves a negative epistemic appraisal of some kind.

You might resist the claim that categorization can ever be appraisable in this way. For you might object that categorization always occurs at the subpersonal level, or in some other way that is exempt from rational appraisal.<sup>29</sup> But notice: my claim is not that categorization is *rationally* appraisable. My claim is the much weaker one that categorization is *epistemically*

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<sup>28</sup> For recent theorists who prefer this model to Siegel's inferential model, see Brewer (2018, pp. 109-110); Millar (2018, p. 253). Many theorists have developed such non-inferential models in more detail: see for example Millar (2008); Fish (2009, pp. 67-74); Brewer (2011, pp. 142-149).

<sup>29</sup> Again, see the contributions of Beck and Springle to Siegel et al. (2018).

appraisable. And this weaker claim would not be threatened even if categorizations were always subpersonal. For it is still possible to make genuinely epistemic appraisals of subpersonal mental processes, states, and events. What makes an appraisal genuinely epistemic is just that it reflects certain distinctive concerns – perhaps concerns for truth, evidence, or knowledge – and that is precisely the kind of appraisal that we can make when I categorize the desk as a desk, or as a zebra.

So everyone should agree that categorizations can be epistemically appraisable. That gets us part of the way towards defending the second premise of the new argument:

(R2\*) It is metaphysically possible for categorizations to be epistemically appraisable and perceptual.

However, it is a vexed question precisely *how* categorization actually occurs. In particular, some theorists think that categorization is sometimes *perceptual*, in the sense that it sometimes occurs within perception proper.<sup>30</sup> Others think that categorization is always *non-perceptual*, in the sense that it always occurs outside of perception, e.g., in belief.<sup>31</sup>

Still, regardless of how categorization occurs in actual human beings, I will argue that it is at least *metaphysically possible* for categorization to occur within perception proper. That will complete my defense of (R2\*).

Now, there is no obvious contradiction in the idea that categorization can occur within perception proper. Thus, I take it that our default assumption should be that this is a genuine metaphysical possibility, barring some good argument to the contrary. My approach, then will

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<sup>30</sup> See for example McDowell (1994); Brewer (1999); Mandelbaum (2018).

<sup>31</sup> See for example Burge (2010); Block (2014); Millar (2018, pp. 258-259).

be to rebut some initially plausible arguments against this possibility. And I see two constituencies – phenomenal conservatives and naïve realists – who might offer such arguments.

Start with phenomenal conservatism. To understand the defining commitment of this view, consider the recent controversy over what happens when (and if) we perceive high-level features – for example, when we see a tree *as a pine tree* or hear a sentence *as being in Russian*. The controversy is over whether there is any *proprietary phenomenal character* associated with perceiving high-level features. *Phenomenal liberals* say that there is. For example, a phenomenal liberal might say that there is some phenomenal character associated with an arborist's seeing a pine tree that is something over and above the phenomenal character associated with her seeing the pine tree's various shapes, colors, textures, and so on.<sup>32</sup>

*Phenomenal conservatives* dissent. They think that perceptual phenomenal character is exhausted by the phenomenal character associated with the low-level features (and perhaps objects) that we perceive; if there is such a thing as perceiving high-level features, then this results in phenomenal changes only insofar as it causes changes in which low-level features (and perhaps objects) we perceive.<sup>33</sup> And a phenomenal conservative might think that this commits her to holding that it is metaphysically impossible for categorization to occur within perception proper.

But this is not so, for two separate reasons.

First, phenomenal conservatism is a view about what *actual human perception* is like. It is not a view about what *every metaphysically possible perception* must be like. And it would be a great leap from the claims of the former kind to claims of the latter kind. So there is not much reason

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<sup>32</sup> See for example Siegel (2006); Bayne (2009); Masrour (2011); Fish (2013).

<sup>33</sup> See for example Byrne (2009); Price (2009); Carruthers and Veillet (2011).

here for the phenomenal conservative to resist the metaphysical possibility of perceptual categorization.

Still, this point brings me (and should bring Siegel) cold comfort. For, as I have said, what is most philosophically interesting is the epistemology of actual human perceivers. So even if phenomenal conservatism just blocks us from arguing that *actual* human perceptions can be rational or irrational, that should greatly dampen our interest in the new argument for the perceptual rationality thesis.

Fortunately, there is a second reason that phenomenal conservatism does not weigh against the metaphysical possibility of perceptual categorization. This is that phenomenal conservatism is a view about the *phenomenal character* of perceptual experience. And phenomenal conservatives typically agree that the hallmark of phenomenal character is that it *generates an (apparent) explanatory gap*.<sup>34</sup> But the present claim is just that categorizations can occur within perceptual experience, *whether or not there is any phenomenal character – any (apparent) explanatory gap* – associated with such categorizations. And so there is nothing in phenomenal conservatism that speaks against (R2\*).

In other words, it is perfectly consistent for the phenomenal conservative to make both of the following claims about an *actual* arborist who sees a pine tree. First, that the phenomenal character of her experience is exhausted by the phenomenal character associated with her perception of various shapes, colors, textures, and the like. And second, that arborist *perceptually* categorizes the tree as a pine tree. Indeed, phenomenal conservatives have themselves often pointed out the coherence, and even the plausibility, of such a view. As phenomenal conservatives Carruthers and Veillet put it:

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<sup>34</sup> For example, phenomenal conservatives Carruthers and Veillet assert that “A property is phenomenal ... only if it gives rise to an explanatory gap” (2011, p. 45).

“The initial nonconceptual outputs of early vision are monitored by a whole host of conceptual systems .... the relevant concept is attached to the nonconceptual representation in question and globally broadcast along with it, for other concept-wielding consumer systems to take note of and draw inferences from.... [However, from] the fact that a given concept is a constitutive *component* of a phenomenally conscious perceptual state it doesn’t follow that the concept makes a constitutive *contribution* to the phenomenal qualities of that state.” (2011, p. 42)

So there is no reason for phenomenal conservatives to reject (R2\*).

But there is another constituency – naïve realists – who might think that they are committed to denying the metaphysical possibility of perceptual categorization. For a central commitment of naïve realism is that any perception, by its nature, involves *non-representational* awareness. But categorization is evidently *representational*. So, naïve realists might reason, they should say that it is metaphysically impossible for categorization to occur within perception proper.

This reasoning is fallacious. Yes, naïve realism says that any perception, by its nature, involves non-representational awareness. But naïve realism does not say that any perception, by its nature, does not *also* involve *representational* awareness. And it is this latter claim that would be needed to rule out the metaphysical possibility of perceptual categorization. In other words, it is perfectly consistent for the naïve realist to say that it is metaphysically possible for a perception to involve *both* a primitive form of non-representational awareness *and* a sophisticated form of conceptual, representational awareness.

This point has been recognized by naïve realists for decades. For instance, William Alston writes:

[Naïve realism] simply consists in the insistence that perception essentially involves a mode of cognition of objects that is nonconceptual in character. Moreover it is that mode of cognition that gives perception its distinctive character vis-a-vis other modes of cognition—abstract thought, fantasy, memory, and so on. But this insistence does *not* commit [the naïve realist] to the denial of [the thesis that] ... perception is typically conceptually structured.... Indeed, I accept that ... [w]hen I look out my study window ... I see various parts of the scene *as* houses, trees, etc., employing the appropriate concepts in doing so. (1999, p. 184)

So even naïve realists should agree that there is nothing in the nature of perceptual experience or in the nature of categorization that makes it metaphysically impossible for categorization to occur within perception proper.

Notice that this marks an important difference between my second premise (R2\*) and Siegel's second premise (R2):

(R2) It is metaphysically possible for perceptual experiences to be the outputs of inferences.

This premise, recall, is one that really should be rejected by many naïve realists. For Siegel's idea is that perceptual experiences might be the outputs of inferences *that operate over perceptual inputs*. But – as we saw in §3 –many naïve realists will think that non-representational mental states or events have the wrong structure to be inferential inputs.

That concludes my defense of:

(R2\*) It is metaphysically possible for categorizations to be epistemically appraisable and perceptual.

Briefly put, my argument was this. First, it should be common ground that categorizations can be epistemically appraisable. Moreover, while it is controversial whether categorization actually occurs within perception proper, it should also be common ground that it is metaphysically possible for categorization to occur within perception proper. For – as even phenomenal conservatives and naïve realists should agree – there is nothing in the nature of categorization or in the nature of perception to block that metaphysical possibility.

## 8. The new argument defended, part 3

The final premise of the new argument for the perceptual rationality thesis is this:

(R3\*) If it is metaphysically possible for beliefs to be parts of the subject's prior outlook and for categorizations to be epistemically appraisable and perceptual, then it is metaphysically possible for there to be rational and irrational perceptual experiences.

The defense of this premise is, in spirit, the same as the defense of Siegel's original premise (R3). The idea is that there is nothing in the nature of perceptual categorizations to prevent them from being rationally appraisable. And since perceptual categorizations are genuinely *perceptual*, a rational appraisal of them would *just be* a rational appraisal of (an important part of) perceptual experiences themselves.

Here is an example that will convey the basic idea. Consider a subject who has the background belief that she is in a jungle full of snakes. Surely it is metaphysically possible for her to perceptually categorize a slithering object as a snake partly on the basis of this background

belief. Moreover, if the belief is justified, and if all else goes well, then this perceptual categorization will itself merit a positive rational appraisal of some kind. By contrast, if the background belief is wildly irrational, then this perceptual categorization will merit a negative rational appraisal of some kind.

This premise is not entirely smooth sailing. The most promising line of objection to it is to say that there is something in the nature of perceptual categorizations that prevents them from being rationally appraisable. For example, you might say that a rationally appraisable state must necessarily meet one or more of the following conditions: being phenomenologically active, or being active with respect to reasoning, or being something that can be formed by reflection, or being rationally adjustable in response to criticism. And you might argue that perceptual categorizations fail to meet the relevant condition(s).

I will not say anything specific in response to this type of objection. I will just note that I can borrow Siegel's own playbook for defending against these criticisms.

In particular, recall that Siegel defends her premise (R3) by considering whether or not any of these conditions blocks perceptual experiences from being rationally appraisable.<sup>35</sup> Now, for some of these conditions, Siegel responds that there are some obviously rationally appraisable states that fail to meet the condition. So these conditions are not genuinely necessary for rational appraisability. Now, I can obviously adopt these responses of Siegel's without modification.

For others of these conditions, meanwhile, Siegel responds that perceptual experiences can meet them. For instance, Siegel argues that in a sense we can make rational adjustments to perceptual experiences simply by *disowning* the experiences in question. Now, these responses of Siegel's are at least as plausible for perceptual categorizations as they are for perceptual experiences more broadly. For example, even if you automatically perceptually categorize a wax

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<sup>35</sup> Again, see Siegel (2017, pp. 31-37).

apple as a real apple, you can still disown that perceptual categorization. So I can simply adapt these responses of Siegel's without loss of effectiveness.

That concludes my defense of the new argument for the perceptual rationality thesis. Along the way, I have argued that the new premises (R1\*) and (R2\*) avoid certain potent objections to Siegel's original premises (R1) and (R2). I have also argued that the new premise (R3\*) is just as plausible as Siegel's original premise (R3). I conclude that the new argument should be more substantially more dialectically effective than Siegel's original argument. And so we should greatly increase our credence in:

The *perceptual rationality thesis*: It is metaphysically possible for there to be rational and irrational perceptual experiences.

Even so, I have not endorsed the new argument flat-out. For although the new premise (R3\*) is on at least an even footing with Siegel's original (R3), I simply do not know whether either of these premises is true. I leave that as a question for further investigation.<sup>36</sup>

## 9. Are any *actual* perceptual experiences rational or irrational?

So far, I have been constructing a new argument only for the thesis that it is *metaphysically possible* for there to be rational and irrational perceptual experiences. This new argument relies on the claim that it is *metaphysically possible* for categorization to occur within perception proper. But what is especially exciting is that there is some emerging empirical evidence that categorization sometimes *actually* occurs within perception proper. And if these results hold up, then a

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<sup>36</sup> For my reservations about (R3), see fn. 8 and the associated main text.

strengthened version of the new argument will support the claim that there are *actual* rational and irrational perceptual experiences.

The empirical evidence that I have in mind has been aptly drawn together by Mandelbaum (2018). In one telling experiment cited by Mandelbaum, subjects were presented with a word, such as “flowers,” and were then shown a series of images. Each image was presented for *just 13 ms*. For comparison, a single blink of the eye takes *at least* 100 ms, so these images were presented for about 1/8 of the time that it takes to rapidly blink your eyes. Moreover, these images were forward- and backward-masked to disrupt any further visual processing. The idea was to ensure that subjects’ visual systems really had only 13 ms to process the images.

Now, for each image presented in this way, subjects had to say whether or not it contained flowers. If the image did contain flowers *and* if subjects correctly noted this fact, then they were presented with two more images, both of which contained flowers, and they had to identify which of these images they had already seen. Astonishingly, despite these remarkable brief presentation times, subjects were able to perform this task at well above chance.<sup>37</sup>

These subjects were presumably performing genuine *categorization* – that is, they were genuinely applying *concepts*. For they had to apply linguistically-presented information – the word “flowers” – to what they perceived, and they then used this information to guide their actions (pressing the “yes” or “no” buttons). The use of a single representation across such varied mental systems is a hallmark of categorization.<sup>38</sup>

Moreover, it seems that this categorization was occurring *perceptually*, rather than cognitively. For feedback processing *even within the visual system* takes about 50 ms to occur, and feedback processing involving cognition proper would take much longer than that. So, given that

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<sup>37</sup> These results are from Potter et al. (2014). I am drawing heavily from the summary in Mandelbaum (2018, p. 267).

<sup>38</sup> See Mandelbaum (2018, p. 268).

the presentation times in the current experiment were just 13 ms, there was simply not enough time for this categorization to have been cognitive.

This is just a taste of the relevant evidence. I invite the interested reader to refer to Mandelbaum (2018) for a much richer defense. But I take this to show that it is at least a live possibility that categorization sometimes *actually* happens within perception proper. That in turn brings us much closer to the conclusion that perceptual rationality is *actual*. By contrast, Siegel's argument, *even if it is sound*, gives us very little reason to think that perceptual rationality might be actual.

To be fair, Siegel does give us *some* reason to think that perceptual rationality might be actual. For example, she mentions the empirical phenomenon of memory color, in which objects that have the shape and texture of a banana are perceived as more yellow than they otherwise would be. What is crucial, however, is that even here Siegel is very restrained: "... there are in principle different interpretations of these experimental results [regarding memory color].... I'm going to assume that [stored information] influences perceptual experience, so that we can explore the idea that those experiences result from an inference" (2017, p. 101). From these remarks, it is clear that Siegel is merely considering what we should say *if* human psychology turns out to work in a particular way. She is making no commitments whatsoever about whether human psychology *really does* work that way.

Thus, my new argument brings us much closer than does Siegel's original argument to conclusions about the epistemology of actual human perceivers. That is a further advantage of the new argument.

## 10. Conclusion

Susanna Siegel has argued for the following claim:

The *perceptual rationality thesis*: It is metaphysically possible for there to be rational and irrational perceptual experiences.

I have some tentative sympathies for this conclusion, but I worry that Siegel's argument relies on needlessly controversial premises. Thus, I have devoted this paper to giving a new and improved argument for the same conclusion.

In particular, Siegel's argument relies on the highly controversial claims that *emotions* can be parts of the subject's outlook, and that these can be *inferential* inputs to perceptual *experiences*. My argument relies on the much less controversial claims that *beliefs* can be parts of the subject's outlook, and that these can be *epistemically appraisable* inputs to perceptual *categorizations*.

To be sure, there remains an important worry that applies with equal force to Siegel's original argument and to my new one: the worry that there is something in the nature of perceptual experience (contra Siegel's argument) or perceptual categorization (contra my argument) that prevents these things from being rationally appraisable. I do not know whether this obstacle is a genuine one. Regardless, what my new argument reveals is that certain background philosophical commitments – to naïve realism, or to a non-cognitive view of emotions – are *not* genuine obstacles to the perceptual rationality thesis. I take that to be real progress.

Now, it is important to recognize that the perceptual rationality thesis is only a claim about what is metaphysically possible. It is not a claim about what is actual. And that reveals one last respect in which the new argument of this paper is an improvement on Siegel's. For the new argument brings us much closer to the conclusion that *actual human beings* sometimes have

rational and irrational perceptual experiences. And, in the end, that is the conclusion that we really care about.

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