

## Emotion-enriched moral perception

Hutton, James

**DOI**

[10.1093/pq/pqae101](https://doi.org/10.1093/pq/pqae101)

**Publication date**

2024

**Document Version**

Final published version

**Published in**

The Philosophical Quarterly

**Citation (APA)**

Hutton, J. (2024). Emotion-enriched moral perception. *The Philosophical Quarterly*.  
<https://doi.org/10.1093/pq/pqae101>

**Important note**

To cite this publication, please use the final published version (if applicable).  
Please check the document version above.

**Copyright**

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

**Takedown policy**

Please contact us and provide details if you believe this document breaches copyrights.  
We will remove access to the work immediately and investigate your claim.

## Emotion-enriched moral perception

JAMES HUTTON 

TU Delft, The Netherlands

*This article provides a new account of how moral beliefs can be epistemically justified. I argue that we should take seriously the hypothesis that the human mind contains emotion-enriched moral perceptions, i.e. perceptual experiences as of moral properties, arising from cognitive penetration by emotions. Further, I argue that if this hypothesis is true, then such perceptual experiences can provide regress-stopping justification for moral beliefs. Emotion-enriched moral perceptions do exhibit a kind of epistemic dependence: they can only justify moral beliefs if the emotions from which they arise are themselves justified. However, to have a justified emotion, one only needs (1) to possess some non-moral information and (2) to respond fittingly to this information. Neither (1) nor (2) requires one to possess any justification for moral beliefs antecedently, so emotion-enriched moral perceptions can halt the regress of moral justification.*

**Keywords:** moral epistemology; moral perception; emotions; cognitive penetration; epistemic dependence.

### I. ‘I saw the unspeakable wrongness’

‘It is curious,’ writes George Orwell in his essay ‘A Hanging’ (1931), ‘but till that moment I had never realized what it means to destroy a healthy, conscious man. When I saw the prisoner step aside to avoid the puddle, I saw the mystery, the unspeakable wrongness of cutting a life short when it is in full stride’. For the philosophical reader, this passage presents an intriguing suggestion. Orwell describes himself as *seeing the wrongness* of putting a man to death. Can perceptual experiences really present us with moral properties such as wrongness? (Talk of ‘seeing’ can be metaphorical, but Orwell equates seeing

**Correspondence to:** James Hutton, [j.hutton@tudelft.nl](mailto:j.hutton@tudelft.nl)

the wrongness with seeing the prisoner step aside.) If so, might these perceptual experiences as of moral properties (henceforth ‘moral perceptions’) help us make sense of the idea that some moral beliefs are rational, or epistemically justified, while others are not?

There is much that is attractive about the suggestion that moral perceptions provide justification for moral beliefs.<sup>1</sup> In the philosophy of perception, arguments from Susanna Siegel and others have convinced many philosophers that mature agents can literally see a rich array of properties: not just the shape and colour of a tree’s leaves and berries, but its property of being a rowan; not just the shape and colour of some letters on a page, but their property of being the word ‘rowan’.<sup>2</sup> If it is philosophically respectable to think we can literally see taxonomic and linguistic properties, then it is not outlandish to explore the idea that we can literally see moral properties too. And since people are normally entitled to believe the contents of their visual experiences, it is *prima facie* plausible that moral perceptions—if they exist—provide justification for moral beliefs.

My aim in what follows is to defend the epistemic significance of moral perception in one of its varieties. In recent years, much of the excitement about moral perception has worn off. Most specialists now agree that moral perception, if such a thing exists, cannot provide a satisfying explanation of how moral beliefs can be epistemically justified.<sup>3</sup> They reach this conclusion by thinking about the mental processes through which moral perception could arise and the epistemic statuses those processes instantiate. One possible mechanism is that a person’s existing moral beliefs infuse her perceptual experiences with moral content through a process of cognitive penetration (a notion I explain below). But, as we will see later, moral perceptions arising in this way are subject to an epistemic regress: they only have the power to justify moral beliefs if the moral beliefs from which they arise are justified already. This means such moral perceptions only have justificatory power if the agent already has a stock of justified moral beliefs from some other source.

<sup>1</sup>Defences of moral perception in this sense include McNaughton (1988) (who invokes the Orwell passage), Greco (2000: 231–48), Watkins and Jolley (2002), McBrayer (2010a,b); Cullison (2010), Audi (2010, 2013); Dancy (2010), Church (2013), Wisniewski (2015), De Mesel (2016) and Werner (2016, 2018, 2020b). NB I am using the term ‘moral perception’ in a way that corresponds to what Werner (2020a) calls ‘contentful’ moral perception, as opposed to ‘attentional’ moral perception. Note however that my discussion is neutral between *representational* views of perception, which explain the intentionality of perception in terms of content, and *relational* views, which cash out the content of perception in terms of an unanalysable perceptual relation to objects and their properties (see Campbell 2002: 114–31; Siegel 2010a). Also note that, for brevity, I am using ‘perception’ and ‘perceptual experience’ interchangeably (glossing over the fact that ‘perception’ is factive in ordinary language).

<sup>2</sup>See Siegel (2006, 2010b) and Bayne (2009).

<sup>3</sup>See Cowan (2015a,b), Faraci (2015, 2019), Crow (2016) and Väyrynen (2018). An important countervailing voice is Werner (2018). His argument, which focuses on intraperceptual learning rather than cognitive penetration, is complementary to the one offered here.

Consequently, these perceptions cannot explain how moral beliefs can be epistemically justified in the first place.

Against this tide of pessimism, I argue that moral perceptions can provide regress-stopping justification for moral beliefs, if they arise through a different mechanism: cognitive penetration by emotions. I argue that emotion-enriched moral perceptions (as I call moral perceptions arising in this way) provide us with a powerful and empirically plausible account of the epistemic foundations of moral inquiry. The article is structured as follows. Section II explains the notion of cognitive penetration and why it is a plausible mechanism for moral perception. Section III considers the hypothesis that moral perceptions arise through cognitive penetration by beliefs and identifies two kinds of problem with this hypothesis. Section IV motivates the hypothesis that moral perceptions arise through cognitive penetration by emotions and argues that it avoids the problems of the previous hypothesis. Section V addresses the worry that emotion-enriched moral perceptions are epistemically dependent, arguing that the kind of dependency they exhibit does not lead to a regress. Section VI addresses a related worry about epistemic redundancy.

## II. The cognitive penetration of perception

In order to assess the epistemic significance of moral perception, we need to understand the mechanisms through which it might arise. I'll begin by introducing a general mechanism through which, very plausibly, perceptual experiences of a rich<sup>4</sup> array of properties can arise: cognitive penetration.<sup>5</sup> For our purposes, the best way to introduce the phenomenon of cognitive penetration is with an example. Consider the Sine-Wave Speech effect (see Remez et al. 1981; Davis and Johnsrude 2007). (I urge the reader to pause here and listen to the online demonstrations available at [www.mrc-cbu.cam.ac.uk/personal/matt.davis/sine-wave-speech](http://www.mrc-cbu.cam.ac.uk/personal/matt.davis/sine-wave-speech) or <https://users.sussex.ac.uk/~cjd/SWS/index.html>.) To experience the effect, you listen to two audio clips in a specific sequence. First, you listen to the Sine-Wave Clip, which sounds like a meaningless jumble of whistling sounds. Next, you listen to the Original Clip, which sounds like a normal, intelligible recording of someone saying a sentence. Finally, you listen to the Sine-Wave Clip again. To your surprise, the Sine-Wave Clip now sounds totally different. Instead of a meaningless jumble of whistles, you now hear the sounds as forming the words of

<sup>4</sup>I follow the somewhat vague convention of using the term 'rich' to gesture towards perceptual experiences which present things as exhibiting complicated properties (e.g. natural kind properties, linguistic properties, moral properties) which go beyond the more conservative list of 'proper sensibles' which uncontroversially show up in perception (e.g. shape, colour, position, pitch, loudness, duration).

<sup>5</sup>See Siegel (2010b: 10–1).

a sentence, namely the sentence you just heard in the Original Clip. (The Sine-Wave Clip is derived from the Original Clip through a process of frequency analysis). Anyone who experiences the effect will, I think, agree; it is not just that you think or believe that the Sine-Wave Clip encodes the sentence. Rather, your auditory experience is different. After hearing the Original Clip, you hear the sounds of the Sine-Wave Clip as forming words.

This effect is significant for our purposes for two reasons. First, your initial auditory experience of the Sine-Wave Clip differs from your later experience of it. A compelling way of explaining this phenomenological datapoint is that your later experience presents the parts of the clip as falling into linguistic kinds (or, equivalently, as instantiating linguistic properties).<sup>6</sup> Thus, the Sine-Wave Speech effect constitutes a beautiful ‘phenomenal contrast’ case, just like the cases that are often used to argue for rich views of perception.<sup>7</sup> Secondly, the Sine-Wave Speech effect illustrates the idea that background mental states of various kinds can affect the contents of perceptual experiences. By listening to the Original Clip, one acquires a mental representation of what was said in that clip. Afterwards, when one hears the Sine-Wave Clip, one’s perceptual experience of it is enriched by this new representation. The term *cognitive penetration* is used to designate such processes of enrichment in which background mental states affect the contents of a person’s perceptions.<sup>8</sup> To count as a case of cognitive penetration, the state must influence the content of the perception directly, by playing a role in perceptual processing, rather than indirectly, e.g. by causing her to look in a certain direction.<sup>9</sup> In cognitive penetration, the person’s perceptual systems access the background state and use it as a parameter when converting sensory information into a perceptual experience.

The Sine-Wave Speech effect illustrates the idea that cognitive penetration can give rise to rich perceptual experiences. On this basis, it’s reasonable to hypothesize that moral perceptions might arise through cognitive penetration.<sup>10</sup> As we’ll see later, with this concrete hypothesis about the mechanism for moral perception in hand, we can get clearer about the ramifications for moral epistemology if the human mind really does contain such perceptions.

<sup>6</sup>Of course, there are moves opponents of rich perception can make in reply (see Burge (2014) and Byrne’s contributions to Siegel and Byrne (2017)). My aim here is not to establish conclusively that cognitive penetration can lead to rich perception, but only to motivate this idea and make it vivid.

<sup>7</sup>See Siegel (2006, 2010b) and Bayne (2009).

<sup>8</sup>There is a growing consensus among cognitive scientists that cognitive penetration is a genuine phenomenon. For surveys, see Collins & Olson (2014), Vetter & Newen (2014) and Newen & Vetter (2017) (though see Firestone and Scholl (2016) for a dissenting view, which they acknowledge swims against the tide). See Block (2023: 338–79) for an up-to-date overview.

<sup>9</sup>See Vance (2014: 259).

<sup>10</sup>See Cowan (2015a: 671–3; 2015b: 175–7) for further arguments that cognitive penetration is the most likely mechanism for moral perception.

But what specific kind of cognitive penetration might lead to perceptions with moral contents?

### III. Belief-enriched moral perception

One hypothesis which has attracted a lot of attention is the idea that moral perceptions arise through cognitive penetration by the agent's pre-existing moral beliefs. Call the putative moral perceptions which arise in this way *belief-enriched* moral perceptions. We can illustrate this hypothesis by fleshing out the Orwell example:

**Belief-Enriched Orwell:** Orwell believes that it's wrong to cut a human life short. His perceptual systems receive information indicating that he and his accomplices are cutting a human life short. His belief cognitively penetrates his visual experience, causing him to see what they are doing as wrong.

When incoming sensory information indicates that an object exhibits non-moral properties which the agent's pre-existing beliefs associate with some moral property, the upshot is a perceptual experience of the object as instantiating that moral property—so the belief-enrichment account goes. This account faces two major problems, the first descriptive and the second epistemic. The Descriptive Problem shows that belief-enrichment cannot explain putative cases of moral perception like Orwell's after all. The Epistemic Problem shows that belief-enriched moral perceptions, if they exist, are less useful for developing a non-sceptical moral epistemology than you might expect.

*Descriptive Problem.* I have modelled BELIEF-ENRICHED ORWELL on the passage with which we began. But in fact, the belief-enrichment account cannot make sense of the details of that passage. Orwell describes himself as seeing a form of wrongness he had 'till that moment [...] never realized' was there. This suggests that Orwell didn't antecedently believe that cutting a human life short was wrong. In his description, the wrongness of capital punishment is something he learns about for the first time through this experience, not something he believed already.<sup>11</sup> However, if Orwell's prior moral beliefs didn't associate the property of cutting a life short with the property of wrongness to begin with, then the belief-enrichment account cannot explain why he would see this action as wrong. If the agent already holds beliefs that associate *cutting a human life short* with *wrongness*, then there's no room for a new moral realization of

<sup>11</sup>This aspect of the Orwell case is emphasized by McNaughton (1988: 102–3).

the kind Orwell describes; on the other hand, if the agent *doesn't* already hold beliefs to that effect, then the belief-enrichment account cannot explain why the agent would now see cutting a life short as wrong. This puts proponents of the belief-enrichment account in a difficult dialectical position. The most compelling putative cases of moral perception are precisely those in which an experience leads an agent to form a moral belief which doesn't follow from what she already believes: these are the cases that cannot be explained away by the rival hypothesis that the agent is quickly inferring a conclusion from her existing moral beliefs.<sup>12</sup> Consequently, an account like the belief-enrichment account, which cannot make sense of cases in which moral perception leads to a new moral realization, is in danger of being self-undermining.

*Epistemic Problem.* The second problem is that, in order for BELIEF-ENRICHED ORWELL's moral perception to have any justificatory power, his prior moral belief must already be justified.<sup>13</sup> To see why, consider a different case:

**Belief-Enriched Julia:** By making a faulty inference, Julia has come to believe that homosexuality is wrong. Now she sees a gay couple kissing and, due to cognitive penetration, sees this act as wrong. On the basis of this moral perception, she forms the belief that it is wrong for these men to kiss.

Is Julia's new moral belief epistemically justified? Intuitively, it is not. Julia's moral perception is shaped by the unjustified belief with which she began. The moral information it contains stems entirely from this unjustified preconception. Therefore, it is counterintuitive to think that the moral belief at which Julia arrives is any more justified than her initial unjustified belief. In general, a belief-enriched moral perception will be incapable of justifying a moral belief unless the moral belief from which it arose was justified to begin with. But this creates an epistemic regress: an agent must already have a stock of justified moral beliefs from some other source before such perceptions can have any justificatory power. Consequently, belief-enriched moral perceptions cannot help us make sense of how moral beliefs can be epistemically justified in the first place.

In previous discussions, authors have tended to move quickly from the Epistemic Problem for belief-enriched moral perception to a general loss of hope in the idea that moral perception can stop the regress of justification for moral

<sup>12</sup>See Hutton (2022: 575–6).

<sup>13</sup>This has been argued by Cowan (2015a,b); Faraci (2015), Crow (2016) and Väyrynen (2018: 127–8). It is widely accepted that similar forms of epistemic dependence apply in non-moral cases of belief-enriched perception too (see Markie 2005; Siegel 2012, 2013; Vance 2014).

belief. For instance, David Faraci lays out this problem and then quickly draws the general conclusion that ‘we almost certainly must give up hope of developing a purely perceptual moral epistemology’ (2015: 2059; cp. Crow 2016: 198; Milona 2017: 2259–60; see also Section V). However, while it’s true that *belief-enriched* moral perceptions cannot provide regress-stopping justification for moral beliefs, there are other mechanisms through which moral perception might arise.<sup>14</sup> We need to look carefully at the epistemic properties of moral perceptions arising in other ways before we give up hope on moral perception. In what follows, I argue that *emotion-enriched* moral perceptions fare better.

#### IV. Emotion-enriched moral perception

An alternative mechanism through which moral perceptions might arise is cognitive penetration by emotions. There is a good deal of evidence that emotions can alter the contents of our perceptions.<sup>15</sup> Moreover, it is commonplace among psychologists and philosophers that a subset of our emotions, known as *moral emotions*, in some sense keep track of the moral statuses of the actions, situations and people we encounter.<sup>16</sup> Therefore, it is plausible that, if our perceptions are cognitively penetrated by moral emotions, the upshot will be perceptions with moral contents. Call moral perceptions produced in this way *emotion-enriched* moral perceptions.

The emotion-enrichment account provides another way of spelling out what is going on in the passage from ‘A Hanging’:

<sup>14</sup>Faraci (2015: 2060) overlooks the possibility of other mechanisms, claiming that the only alternative to belief-enrichment is telepathy.

<sup>15</sup>Studies suggesting that emotions can alter the way things perceptually appear to us include van Ulzen *et al.* (2008), Anderson *et al.* (2011), Song *et al.* (2012), Stefanucci *et al.* (2012), Prinz & Seidel (2012), Storbeck & Stefanucci (2014), Pitts *et al.* (2014) and Geuss *et al.* (2016). However, Firestone & Scholl (2016: 13–5) argue that more research is needed to establish whether these findings indicate genuine cognitive penetration or whether emotions only affect perception indirectly by modulating attention. (NB, to my mind, the studies I’ve cited all avoid Firestone and Scholl’s other main criticism, namely failing to distinguish effects on perception itself from effects on perception-based judgements.) Consequently, we should treat cognitive penetration by emotion as a promising empirical hypothesis rather than an established fact. But see Matey (2016) and Fulkerson (2020a) for more forthright, philosophical-cum-empirical arguments that cognitive penetration by emotion can generate perceptual experiences with evaluative or ‘affective-motivational’ content; cp. Siegel (2012: 207). (Terminological note: if one thinks emotions do not count as cognitive, one might prefer to call this ‘affective penetration’. However, since there is no settled definition of the ‘cognitive’, I will follow the convention of referring to this as a form of cognitive penetration. See Prinz (2004: 41–51) for relevant discussion.)

<sup>16</sup>For this general picture, see e.g. Roberts (2003) and Haidt (2012).



**Emotion-Enriched Orwell:** Orwell sees that he and his accomplices are cutting a man's life short. This leads him to feel a stab of guilt about what they are doing. The guilt penetrates his perceptual experience, causing him to see what they are doing as wrong. On this basis, he forms the belief that killing this man is wrong.

Let's see how this account fares with the two problems I identified in the previous section.

*Descriptive Problem.* This account does a much better job of capturing the descriptive details of the passage than the belief-enrichment account did. In particular, emotion-enrichment allows us to make sense of how Orwell could have come to see a kind of wrongness he had 'till that moment [...] never realized' was there. What EMOTION-ENRICHED ORWELL sees is not something entailed by moral principles he already believes. Nor is it a reflection of the moral beliefs he has previously formed about particular cases of cutting a human life short. Instead, a novel experience that evokes certain moral emotions leads him to see capital punishment in a new light. Indeed, it's a familiar phenomenon within philosophy of emotion that an agent's emotions can conflict with her existing evaluative beliefs, a phenomenon known as recalcitrant emotion.<sup>17</sup> Thus, even if an agent in Orwell's situation initially believes that capital punishment is sometimes warranted, he might nevertheless experience a negative moral emotion towards hanging upon witnessing it first hand.<sup>18</sup> Through cognitive penetration, this could lead him to see the action as wrong. In general, then, the emotion-enrichment account allows us to make sense of how an agent could have moral perceptions which outstrip or even conflict with her antecedent moral beliefs. It thus gives us a plausible explanation of what is going on in these cases of moral 'conversion' or 'breakthrough'.

To underline this, let's consider how the emotion-enrichment account can make sense of a real-life case of moral conversion which, in many ways, parallels the Orwell passage. In his autobiographical story, *A Confession*, Leo Tolstoy describes how his ethical outlook changed when he witnessed an execution in

<sup>17</sup>For example, D'Arms & Jacobsen (2003).

<sup>18</sup>Cp. the testimony of an anonymous prison chaplain quoted in the *New Statesman* in 1931 (the same year Orwell's essay was published): 'It cannot be denied that an execution is a moral shock of such a nature that it is impossible to say what may be its ultimate effect on mind and body. The final scene must always be a haunting and imperishable memory – the dreadful hooded figure on the scaffold; the thud of the falling drop; the awful plunge into the yawning pit, and the jerk as the rope tautens and sways. *No one can leave the slaughter-shed without a deep sense of humiliation, horror and shame*' (quoted in Nevinson 1931, my italics). This was a time when hanging was state-sanctioned and morally condoned by many. So, many of the people who shared the chaplain's feelings of 'humiliation, horror and shame' will have come to the 'slaughter-shed' in the belief that hanging is morally permissible.

19th century Paris (Tolstoy [1882] 2008). As a young man, Tolstoy had believed in an ethics of ‘progress’ according to which capital punishment is sometimes warranted as a means of bringing about ‘evolution’ in society ([1882] 2008: 7–12). (Tolstoy doesn’t quite say all of this explicitly, but it is implicit in what he does say.) Later, he describes how ‘the sight of an execution revealed to [him] the precariousness of [his] superstition in progress’:

When I saw the heads being separated from the bodies and heard them thump, one after the next, into the box I understood, and not just with my intellect but with my whole being, that no theories of [...] progress could justify this crime. I realized that even if every single person since the day of creation had, according to whatever theory, found this necessary I knew that it was unnecessary and wrong, and therefore that judgements on what is good and necessary must not be based on [...] progress, but on the instincts of my own soul. ([1882] 2008: 12–3)

Any account of Tolstoy’s experience of the execution must accommodate two striking features. First, the moral import of his reported experience is at variance with his prior moral beliefs: it leads him to form the new belief that capital punishment is ‘unnecessary and wrong’ and to abandon the ethics of progress to which he had previously subscribed. Secondly, the experience is at least partly perceptual in nature: the whole experience is a gruesomely multisensory affair, involving sights and sounds; it is the ‘sight’ of the execution through which this new ethical proposition is ‘revealed’; Tolstoy takes the experience to involve more than just ‘intellect’—it feels to him like an ‘instinct of [his] own soul’ which involves his ‘whole being’.

There are various ways one might try to pin down the moral psychology at work here,<sup>19</sup> but it is noteworthy that the emotion-enrichment account offers a good explanation of these features:

**Emotion-Enriched Tolstoy:** Tolstoy sees the headless corpses and hears the inanimate thumps of the severed heads. This leads him to experience extreme negative moral emotions such as horror, revulsion and repugnance. These emotions penetrate his perceptual experience, leading him to see and hear the event as grotesque, aversive and forbidden. On this basis, he comes to believe that capital punishment is wrong.

This way of explaining the case readily makes sense of the fact that Tolstoy’s experience is partly perceptual in nature. (It also readily makes sense of the arguably obvious fact that Tolstoy’s experience is a highly emotional one.) Distinctively, it also readily makes sense of the divergence between the content of the experience and Tolstoy’s pre-existing moral beliefs. Due to the possibility of divergence between an agent’s prior moral beliefs about a practice

<sup>19</sup>For alternative accounts of similar cases, see Chudnoff (2015) and Hutton (2022, 2023).

and her moral-emotional response to witnessing it, the process of emotion-enrichment can lead an agent to perceive the moral status of that practice as being different from what he had thought it was. In this way, the emotion-enrichment account makes good sense of how Tolstoy's moral experience can diverge from his prior ethical outlook.<sup>20</sup>

*Epistemic Problem.* Crucially for our purposes, emotion-enriched moral perceptions are not just psychologically independent of the agent's prior moral beliefs; they are epistemically independent of them too. Since the moral content of an emotion-enriched moral perception doesn't stem from any prior moral belief, these perceptions do not exhibit the structure of epistemic dependence revealed by cases like BELIEF-ENRICHED JULIA: there is no prior moral belief held by EMOTION-ENRICHED ORWELL or EMOTION-ENRICHED TOLSTOY which already needs to be justified in order for the emotion-enriched moral perception to have justificatory power. Consequently, we do not get the kind of epistemic regress that bedevilled the belief-enrichment account. Therefore, emotion-enriched moral perceptions seem capable of providing regress-stopping justification for moral beliefs.

Some authors, however, have argued that the emotion-enrichment account ultimately fares no better than the belief-enrichment account, because it exhibits its own form of epistemic dependence. I turn to this worry in the next section.

## V. The epistemic dependence of emotion-enriched moral perception

Although emotion-enrichment has received comparatively little attention from moral epistemologists, I'm not the first to note it as a mechanism through

<sup>20</sup> A reviewer raises the following worry: by all accounts, Tolstoy is experiencing an emotion towards the execution. So, why think he is *also* experiencing an emotion-enriched moral perception? Isn't it simpler if Tolstoy is just experiencing the emotion, without this having an effect on the content of his perceptual experience? I have a lot of sympathy with this point. The emotion-enriched moral perception account is just one hypothesis about what is going on in cases like Tolstoy's and Orwell's, and it is less simple than the 'emotional intuitionist' account I advocate in Hutton (2022). Nevertheless, we should take the emotion-enriched moral perception model seriously *qua* hypothesis and explore its moral-epistemic ramifications. This is because, as noted in fn. 15, there is a body of evidence suggesting that emotions cognitively penetrate perceptual experience. Moreover, there is reason to think that complex interactions between different processes are ubiquitous in the human mind/brain, meaning that arguments from simplicity should not be given undue weight. As neuroscientist Luiz Pessoa puts it, 'the architectural features of the brain provide *massive* opportunity for cognitive-emotional interactions, encompassing *all* brain territories. [...] In this sense, vision is never *pure*, but only *affective* vision. A similar point can be made for other sensory modalities' (2014: 257, italics in original; see also 2022; Fulkerson 2020a,b). I submit that this provides sufficient reason to be interested in what follows for moral epistemology if the emotion-enriched moral perception account turns out to be correct, even though simpler accounts are available.

which moral perception might arise. So, why hasn't emotion-enriched moral perception been trumpeted as a source of regress-stopping justification before? The reason is that emotion-enriched moral perceptions exhibit a form of epistemic dependence which, in some respects, parallels the epistemic dependence exhibited by belief-enriched moral perceptions. This has led previous authors to apply their pessimism about belief-enriched moral perception to emotion-enriched moral perception too. In this section, I will show that these authors are partly right: emotion-enriched moral perceptions really do exhibit a kind of epistemic dependence. However, I will argue that, despite the parallels with belief-enriched moral perception, the epistemic dependence of emotion-enriched moral perception does not lead to a regress. Crucially, this means that emotion-enriched moral perceptions really can explain how moral beliefs can be epistemically justified, despite the dependency they exhibit.

To understand the form of epistemic dependence which emotion-enriched moral perceptions exhibit, we first need to understand the fact that emotions, like beliefs, can be evaluated as justified or unjustified. We can make this perspicuous by rehearsing some standard ideas from the philosophy of emotion. Each token emotion has an intentional object, which we call its *target*. Each emotion-type is paired with a certain evaluative property, which we call its *formal object*. We call a token emotion *fitting* iff its target exemplifies the formal object. (E.g. an agent's outrage is fitting iff the thing she's outraged by is wrongful; an agent's guilt is fitting iff the deed she feels guilty about is a wrongdoing for which she is culpable; etc.) Now, each token emotion is based on preceding mental representations which provide information about its target.<sup>21</sup> (E.g. the agent's outrage at a remark is based on hearing what was said; her guilt is based on remembering what she did.) These preceding representations are called the emotion's *cognitive bases*. Putting all these notions together, Julien Deonna and Fabrice Teroni propose that we should call a token emotion *justified* iff, in the situation the subject is in, the non-evaluative properties the cognitive bases represent the target as having 'constitute [...] an exemplification' of the formal object.<sup>22</sup> To illustrate, the agent's outrage is justified iff her auditory experience presents the remark as having a cluster of features which are (or would be) jointly sufficient, in that context, to make the remark wrongful. Or her guilt is justified iff the features she remembers her deed as having are jointly sufficient, in that context, to make the remark a culpable wrongdoing. In short, a justified emotion is one that is a *fitting response to the information on which it is based*.<sup>23</sup>

<sup>21</sup>Deonna & Teroni (2012: 5).

<sup>22</sup>Deonna & Teroni (2012: 96–8); cp. Goldie (2004a: 97–8; 2004b: 254–5).

<sup>23</sup>While this is the orthodox account of emotional justification, it is not wholly uncontroversial. Smith (2014) objects to it on the grounds that there is a 'gap' between the non-evaluative contents of the cognitive bases and the evaluative nature of the emotions they allegedly justify

Now that we understand the idea that an emotion can be justified or unjustified, we ought to wonder: what is the upshot, epistemically speaking, if an emotion-enriched moral perception arises from an unjustified emotion? Let's explore this by considering another imaginary case, an emotional analogue of BELIEF-ENRICHED JULIA:<sup>24</sup>

**Emotion-Enriched Katherine:** Katherine does not believe any moral principles prohibiting homosexuality, but she does tend to experience negative emotions towards gay people. Today, Katherine sees a gay couple kissing, and feels outraged. This outrage cognitively penetrates her visual experience, causing her to see the kiss as wrong. On this basis, she forms the belief that it is wrong for these men to kiss.

Does this emotion-enriched moral perception confer justification on Katherine's new moral belief? Intuitively, it does not. Because Katherine's outrage is not based on representations of any genuinely wrong-making properties, it is unjustified. In light of this, our intuitions about EMOTION-ENRICHED KATHERINE are much the same as our intuitions about BELIEF-ENRICHED JULIA; a moral perception stemming from an unjustified emotion has just as little justificatory power as one stemming from an unjustified belief. This then is the form of epistemic dependence exhibited by emotion-enriched moral perception: the moral emotion which gives rise to the perception must be a justified one, in order for the perception to be capable of justifying a moral belief.

This form of epistemic dependency has led some previous authors to dismiss emotion-enriched moral perception as a source of regress-stopping justification for moral beliefs. It is on this basis that Robert Cowan (2015b) concludes that we cannot spell out an 'adequate intuitionist epistemology' by appealing to emotion-enriched moral perceptions.<sup>25</sup> This response is understandable given the obvious parallels between BELIEF-ENRICHED JULIA and EMOTION-ENRICHED KATHERINE. However, further scrutiny is needed.

(cp. Echeverri 2019: 551–2). Theorists have responded to this problem by adding a further condition: to be justified, an emotion also needs to result from an emotional disposition with the right shape (Echeverri 2019; Deonna and Teroni 2022). Specifically, the disposition needs to output emotions that are fitting responses to their cognitive bases in a manner that is *reliable* and *counterfactually robust*. Below (footnote 26), I show how my main argument can be modified in the light of this more sophisticated account of emotional justification. A different criticism of Deonna and Teroni's account comes from Müller (2019, *forthcoming*), who claims that it is logically impossible for an emotion to have cognitive bases with exclusively non-evaluative contents (cp. Mulligan 2010; Massin 2023). I find the arguments for this view unconvincing; see Mitchell (2019; 2021) for thorough criticisms.

<sup>24</sup>Cowan (2015b: 189) and Väyrynen (2018: 127–8) discuss this kind of case.

<sup>25</sup>See also Väyrynen (2018: 127–8).

The Epistemic Problem for belief-enriched moral perception did not arise simply from the fact that those perceptions exhibit *some form* of epistemic dependence. Rather it arose from the fact that they exhibit a kind of epistemic dependence that *opens up a regress* of justification for moral beliefs. The problem, as the case of BELIEF-ENRICHED JULIA reveals, is that an agent needs to have justification for a moral belief antecedently in order for her belief-enriched moral perception to be capable of justifying a subsequent moral belief. Because this iterates, it follows that an agent must have justification for some moral beliefs from some other source to get the process going. Failing this, the moral beliefs the agent forms on the basis of belief-enriched moral perception will without exception be epistemically unjustified. For this reason, belief-enriched moral perception cannot explain how epistemic justification for moral beliefs arises in the first place.

In contrast, the case of EMOTION-ENRICHED KATHERINE only indicates that an agent needs to have a *justified emotion* in order for her emotion-enriched moral perception to have the power to justify a moral belief. However, as we have seen, in order to have a justified emotion, an agent only needs to (1) possess some non-moral information and (2) respond fittingly to that information. So long as an agent can meet both conditions without possessing justification for moral beliefs, there will be no regress; emotion-enriched moral perceptions will be capable of providing epistemic foundations for moral inquiry.

An agent does not need to possess any justification for moral beliefs in order to meet (1), because one does not need justification for moral beliefs in order to possess non-moral information. Nor does an agent need to possess any justification for moral beliefs in order to meet (2), because the ability to respond fittingly to one's non-moral information (i.e. in a manner that will be fitting so long as the information is accurate) is a matter of being habituated into the right pattern of emotional responsiveness, not a matter of holding some propositional attitude, or being entitled to do so. To elaborate, an agent's emotional response to a given cluster of non-moral information depends on the process of habituation she has undergone in the course of childhood and later life. Some agents become entrained in patterns of emotional response which tend to result in unfitting emotions. For instance, an agent might be brought up to experience negative moral emotions towards people who have harmless but atypical sexual preferences. Those agents' emotions will frequently be unjustified irrespective of what non-moral information they possess. But other agents are brought up to have emotional dispositions which closely mirror the genuine patterns of non-moral-to-moral determination which constitute the moral landscape. Such agents will tend to respond to the right- or wrong-making properties of objects by experiencing fitting positive or negative moral emotions towards those objects. Those agents' emotions

will tend to be justified. There is no reason to think that an agent needs to possess justification for moral beliefs in order to fall into the latter category.<sup>26</sup>

It follows that an agent can have a justified emotion without antecedently possessing justification for any moral belief. If such an emotion gives rise to an emotion-enriched moral perception, that perception will be capable of justifying a subsequent moral belief, with no threat of a regress. In this way, emotion-enriched moral perceptions can halt the regress of justification for moral beliefs, despite exhibiting a form of epistemic dependence.<sup>27</sup>

## VI. Objection: Epistemic Redundancy

Before concluding, let me address an additional objection. Discussing a case like EMOTION-ENRICHED ORWELL, Robert Cowan writes: ‘with respect to [his] belief that [*this killing*] is wrong, it seems that it is [Orwell]’s emotional experience that is *really* doing the epistemological work. Indeed, one might say that the perceptual experience that [*this killing*] is wrong isn’t adding anything to [Orwell]’s justification for [this] belief.’<sup>28</sup> The worry is that in cases where an emotion-enriched moral perception arises from a justified emotion, we might think that the emotion itself already provides justification for the relevant moral belief. If so, then Orwell gains nothing epistemically from the presence of the emotion-enriched moral perception. If that’s right, then emotion-enriched moral perceptions are epistemically redundant.

In order to assess whether emotion-enriched moral perceptions are redundant in this sense, we need to distinguish two claims:

1. An emotion-enriched moral perception’s justificatory power depends on the penetrating emotion’s *being justified*.
2. An emotion-enriched moral perception’s justificatory power depends on the penetrating emotion’s *itself having justificatory power*.

<sup>26</sup>What if we apply the more sophisticated account of emotional justification described above (footnote 23)? First, consider agents whose dispositions tend to produce unfitting emotions; on the sophisticated account, *none* of their emotions will count as justified. Secondly, consider agents whose dispositions tend to produce fitting emotions; for those agents, the sophisticated account and the simple account give the same result: most of their emotions are justified. So, applying the sophisticated account affects the details of which agents’ emotions are justified (and *ipso facto* whose emotion-enriched moral perceptions have justificatory power); but it doesn’t affect the crucial structural point that agents can have justified emotions without antecedently possessing justification for moral beliefs.

<sup>27</sup>This means that Cowan is wrong to claim that ‘an adequate intuitionist epistemology must ultimately account for non-inferentially justified belief in terms of *epistemically independent* sources’ (2015b: 188, italics in original; cp. Väyrynen 2018: 127). For further relevant discussion, suggesting that Cowan may be friendly to my amendment, see Cowan (2018: 227–31).

<sup>28</sup>Cowan (2015b: 189), italics in original, incidental details altered to fit the Orwell case. See also Milona (2017: 2260). Thanks to a reviewer for pressing me to address this.

Cases like EMOTION-ENRICHED KATHERINE give us a reason to endorse (1). In contrast, we have not seen any reason to endorse (2). Nor do we find an argument for (2) in Cowan's discussion or elsewhere in the literature. But a theorist who endorses (1) can maintain that emotion-enriched moral perceptions have justificatory power even if emotions do not. That would mean that emotion-enriched moral perceptions are far from epistemically redundant: when an emotion occurs on its own, the agent doesn't have justification for the relevant moral belief; but when an emotion-enriched moral perception occurs, the agent gains the relevant justification. Thus, unless there is reason to think (2) is true (and no reason seems forthcoming), we should not conclude that emotion-enriched moral perceptions are epistemically redundant.

For concreteness, let me sketch a well-motivated combination of views from which it follows that emotion-enriched moral perceptions provide justification for moral beliefs, while the emotions from which they arise do not. A theorist might hold that (a) a mental state needs to include the property of wrongness as part of its content in order to justify beliefs about wrongness (e.g. Huemer 2001) and (b) evaluative properties do not figure in the content of emotions, because emotions are evaluative at the level of intentional mode rather than content (e.g. Deonna and Teroni 2014). On this respectable combination of views, it comes out that Orwell's emotion of guilt does not give him justification for believing that *this killing is wrong*: although guilt is in some sense an 'evaluative' type of attitude<sup>29</sup> (on this view), it does not have the kind of content that would give Orwell justification for forming a belief regarding wrongness. But then (according to this combination of views) the process of cognitive penetration makes all the difference; Orwell's perceptual systems access the evaluative information that is latent in the emotion's attitude-type and transfer this information to the content of a perceptual experience. Through this subpersonal process of emotion-enrichment, George's inchoate attitude of guilt gives rise to a perceptual experience which, for the first time, makes it manifest to him that *this killing is wrong*. By binding the evaluative property to the perceived object, the process of emotion-enrichment yields a mental state which gives George justification for believing a moral proposition that he previously did not have justification to believe. On this respectable combination of views, Cowan's assertion that 'the perceptual experience [...] isn't adding anything to [Orwell]'s justification' is incorrect.<sup>30</sup>

<sup>29</sup>See Massin (2023: 789–90) for discussion of the sense in which, on this kind of view, emotions are evaluative attitudes despite lacking evaluative content.

<sup>30</sup>Here is another combination of views with the same implication: we might hold (a) that an experience can only justify a belief if it involves the deployment of conceptual capacities (McDowell 1994; Brewer 1999), (b) that at least some perceptual experiences, including emotion-enriched moral perceptions, involve the deployment of conceptual capacities (*ibid.*), but that (c) emotions do not involve the deployment of conceptual capacities (Tappolet 2016: 16–7; Mitchell 2020).



What these considerations show is that emotion-enriched moral perceptions can provide regress-stopping justification, even if it turns out that emotions cannot justify moral beliefs. In this sense, emotion-enriched moral perceptions are not rendered epistemically redundant by the emotions that precede them.

## VII. Conclusion

Emotion-enriched moral perceptions provide a satisfying explanation of how moral beliefs can be epistemically justified. Although these perceptions exhibit a form of epistemic dependence, the dependence in question does not open up a regress. Consequently, emotion-enriched moral perceptions are capable of providing epistemic foundations for moral inquiry. There is promising evidence in favour of the empirical hypothesis that the human mind really does contain emotion-enriched moral perceptions. What's more, unlike rival versions of moral perception, emotion-enriched moral perception provides a descriptively adequate account of the moral psychology of conversion cases. Philosophers interested in the foundations of morality should take heed: emotion-enriched moral perceptions provide a powerful and empirically plausible account of the epistemic foundations of moral inquiry.<sup>31</sup>

## Funding

This research was funded by an Early Career Fellowship from the Leverhulme Trust, Grant No. ECF-2020-289.

## References

- Anderson, E., Siegel, E., and Feldman Barrett, L. (2011) 'What You Feel Influences What You See: The Role of Affective Feelings in Resolving Binocular Rivalry', *Journal of Experimental Social Psychology*, 47: 856–60. <https://doi.org/10.1016/j.jesp.2011.02.009>
- Audi, R. (2010) 'Moral Perception and Moral Knowledge', *Proceedings of the Aristotelean Society, Supplementary Volumes*, 84: 79–97. <https://doi.org/10.1111/j.1467-8349.2010.00187.x>
- Audi, R. (2013) *Moral Perception*. Oxford: OUP.
- Bayne, T. (2009) 'Perception and the Reach of Phenomenal Content', *The Philosophical Quarterly*, 59: 385–404. <https://doi.org/10.1111/j.1467-9213.2009.631.x>
- Block, N. (2023) *The Border between Seeing and Thinking*. Oxford: OUP.
- Brewer, B. (1999) *Perception and Reason*. Oxford: OUP.
- Burge, T. (2014) 'Reply to Block: Adaptation and the Upper Border of Perception', *Philosophy and Phenomenological Research*, 89: 573–83.
- Campbell, J. (2002) *Reference and Consciousness*. Oxford: OUP.

<sup>31</sup>This article has benefitted from comments from Paulina Sliwa, Maxime Lepoutre, Alex Moran, Yanjie Ding and an audience at the University of Edinburgh. I gratefully acknowledge the Leverhulme Trust, who funded the fellowship during which it was written.

- Chudnoff, E. (2015) 'Moral Perception: High-Level Perception or Low-Level Intuition?', in T. Breyer and C. Gutland (eds.) *Phenomenology of Thinking*, pp. 207–19. London: Routledge.
- Church, J. (2013) *Possibilities of Perception*. Oxford: OUP.
- Collins, J. and Olson, I. (2014) 'Knowledge Is Power: How Conceptual Knowledge Transforms Visual Cognition', *Psychonomic Bulletin & Review*, 2: 843–60. <https://doi.org/10.3758/s13423-013-0564-3>
- Cowan, R. (2015a) 'Cognitive Penetrability and Ethical Perception', *Review of Philosophy and Psychology*, 6: 665–82. <https://doi.org/10.1007/s13164-014-0185-4>.
- Cowan, R. (2015b) 'Perceptual Intuitionism', *Philosophy and Phenomenological Research*, 90: 164–93. <https://doi.org/10.1111/phpr.12023>
- Cowan, R. (2018) 'Epistemic Sentimentalism and Epistemic Reason-Responsiveness', in A. Bergqvist and R. Cowan (eds.) *Evaluative Perception*, pp. 219–36. Oxford: OUP.
- Crow, D. (2016) 'The Mystery of Moral Perception', *Journal of Moral Philosophy*, 13: 187–210. <https://doi.org/10.1163/17455243-4681053>
- Cullison, A. (2010) 'Moral Perception', *European Journal of Philosophy*, 18: 159–75. <https://doi.org/10.1111/j.1468-0378.2009.00343.x>
- Dancy, J. (2010) 'Moral Perception', *Proceedings of the Aristotelian Society, Supplementary Volumes*, 84: 99–117.
- D'Arms, J. and Jacobson, D. (2003) 'The Significance of Recalcitrant Emotion (or, Anti-Quasijudgmentalism)', *Royal Institute of Philosophy Supplement*, 52: 127–45. <https://doi.org/10.1017/S1358246100007931>
- Davis, M. H. and Johnsrude, I. S. (2007) 'Hearing Speech Sounds: Top-down Influences on the Interface between Audition and Speech Perception', *Hearing Research*, 229: 132–47. <https://doi.org/10.1016/j.heares.2007.01.014>
- Deonna, J. and Teroni, F. (2012) *The Emotions: A Philosophical Introduction*. London: Routledge.
- Deonna, J. and Teroni, F. (2014) 'In what Sense Are Emotions Evaluations?', in S. Roeser and C. Todd (eds.) *Emotion and Value*, pp. 15–29. Oxford: OUP.
- Deonna, J. and Teroni, F. (2022) 'Why Are Emotions Epistemically Indispensable?', *Inquiry*, 1–23. <https://doi.org/10.1080/0020174X.2022.2126147>
- Echeverri, S. (2019) 'Emotional Justification', *Philosophy and Phenomenological Research*, 98: 541–66. <https://doi.org/10.1111/phpr.12453>
- Faraci, D. (2015) 'A Hard Look at Moral Perception', *Philosophical Studies*, 172: 2055–72. <https://doi.org/10.1007/s11098-014-0397-6>
- Faraci, D. (2019) 'Moral Perception and the Reliability Challenge', *Journal of Moral Philosophy*, 16: 63–73. <https://doi.org/10.1163/17455243-20170002>
- Firestone, C. and Scholl, B. J. (2016) 'Cognition Does Not Affect Perception: Evaluating the Evidence for "Top-down" Effects', *Behavioral and Brain Sciences*, 39: e229. <https://doi.org/10.1017/S0140525x15000965>
- Fulkerson, M. (2020a) 'Emotional Perception', *Australasian Journal of Philosophy*, 98: 16–30. <https://doi.org/10.1080/00048402.2019.1579848>
- Fulkerson, M. (2020b) 'Perception, Emotion, and the Interconnected Mind', *Journal of Consciousness Studies*, 27: 7–30.
- Geuss, M. N., McCardell, M. J., and Stefanucci, J. K. (2016) 'Fear Similarly Alters Perceptual Estimates of and Actions over Gaps', *PLoS One* 11: e0158610. <https://doi.org/10.1371/journal.pone.0158610>
- Goldie, P. (2004a) 'Emotion, Feeling, and Knowledge of the World', in R. Solomon (ed.) *Thinking about Feeling*, pp. 91–106. Oxford: OUP.
- Goldie, P. (2004b) 'Emotion, Reason, and Virtue', in D. Evans and P. Cruse (eds.) *Emotion, Evolution, and Rationality*, pp. 249–66. Oxford: OUP.
- Greco, J. (2000) *Putting Skeptics in Their Place*. Cambridge: CUP.
- Haidt, J. (2012) *The Righteous Mind*. London: Penguin.
- Huemer, M. (2001) *Skepticism and the Veil of Perception*. Oxford: Rowman & Littlefield.
- Hutton, J. (2022) 'Moral Experience: Perception or Emotion?', *Ethics*, 132: 570–97. <https://doi.org/10.1086/718079>
- Hutton, J. (2023) 'What Attentional Moral Perception Cannot Do but Emotions Can', in R. Cowan (ed.) *Special Issue on Moral Perception, Philosophies*, vol. 8, pp. 1–20. Basel: MDPI. <https://doi.org/10.3390/philosophies8060106>

- Markie, P. (2005) 'The Mystery of Direct Perceptual Justification', *Philosophical Studies*, 126: 347–73. <https://doi.org/10.1007/s11098-004-7795-0>
- Massin, O. (2023) 'The Reactive Theory of Emotions', *European Journal of Philosophy*, 31: 785–802. <https://doi.org/10.1111/ejop.12736>
- Matey, J. (2016) 'Good Looking', *Philosophical Issues*, 26: 297–313. <https://doi.org/10.1111/phis.12083>
- McBrayer, J. (2010a) 'A Limited Defense of Moral Perception', *Philosophical Studies*, 149: 305–20. <https://doi.org/10.1007/s11098-009-9363-0>
- McBrayer, J. (2010b) 'Moral Perception and the Causal Objection', *Ratio*, 23: 291–307. <https://doi.org/10.1111/j.1467-9329.2010.00468.x>
- McDowell, J. (1994) *Mind and World*. Cambridge, MA: Harvard University Press.
- McNaughton, D. (1988) *Moral Vision*. Oxford: Blackwell.
- Mesel, B. D. (2016) 'Seeing Color, Seeing Emotion, Seeing Moral Value', *Journal of Value Inquiry*, 50: 539–55. <https://doi.org/10.1007/s10790-015-9535-4>
- Milona, M. (2017) 'Intellect versus Affect: Finding Leverage in an Old Debate', *Philosophical Studies*, 174: 2251–76. <https://doi.org/10.1007/s11098-016-0797-x>
- Mitchell, J. (2019) 'Pre-Emotional Awareness and the Content-Priority View', *The Philosophical Quarterly*, 69: 771–94. <https://doi.org/10.1093/pq/pqz018>
- Mitchell, J. (2020) 'On the Non-Conceptual Content of Affective-Evaluative Experience', *Synthese*, 197: 3087–111. <https://doi.org/10.1007/s11229-018-1872-y>
- Mitchell, J. (2021) *Emotion as Feeling towards Value: A Theory of Emotional Experience*. Oxford: OUP.
- Müller, J. M. (2019) *The World-Directedness of Emotional Feeling*. Cham: Palgrave Macmillan.
- Müller, J. M. (forthcoming) 'In Defence of the Content-Priority View of Emotion', *Dialectica*.
- Mulligan, K. (2010) 'Emotions and Values', in P. Goldie (ed.) *The Oxford Handbook of Philosophy of Emotion*, pp. 475–500. Oxford: OUP.
- Nevinson, H. W. (1931) 'On the Stark Toll Capital Punishment Has Inflicted on British Society', *New Statesman*, 14 March. <https://www.newstatesman.com/archive/2021/04/ns-archive-hanging>, accessed 5 June 2024.
- Newen, A. and Vetter, P. (2017) 'Why Cognitive Penetration of Our Perceptual Experience Is Still the Most Plausible Account', *Consciousness and Cognition*, 47: 26–37. <https://doi.org/10.1016/j.concog.2016.09.005>
- Orwell, G. (1931) 'A Hanging', *The Adelphi*, August 1931. <https://www.orwellfoundation.com/the-orwell-foundation/orwell/essays-and-other-works/a-hanging/>, accessed 21 October 2020.
- Pessoa, L. (2014) *The Cognitive-Emotional Brain: From Interactions to Integration*. Cambridge, MA: The MIT Press.
- Pessoa, L. (2022) *The Entangled Brain: How Perception, Cognition, and Emotion Are Woven Together*. Cambridge, MA: The MIT Press.
- Pitts, S., Wilson, J. P., and Hugenberg, K. (2014) 'When One Is Ostracized, Others Loom: Social Rejection Makes Other People Appear Closer', *Social Psychological and Personality Science*, 5: 550–7. <https://doi.org/10.1177/1948550613511502>
- Prinz, J. (2004) *Gut Reactions: A Perceptual Theory of Emotion*. Oxford: OUP.
- Prinz, J. and Seidel, A. (2012) 'Alligator or Squirrel: Musically Induced Fear Reveals Threat in Ambiguous Figures', *Perception*, 41: 1535–9. <https://doi.org/10.1068/p7290>
- Remez, R. E. et al. (1981) 'Speech Perception without Traditional Speech Cues', *Science*, 212: 947–50. <https://doi.org/10.1126/science.7233191>
- Roberts, R. (2003) *Emotions: An Essay in Aid of Moral Psychology*. Cambridge: CUP.
- Siegel, S. (2006) 'Which Properties Are Represented in Perception?', in T. Gendler and J. Hawthorne (eds) *Perceptual Experience*, pp. 481–502. Oxford: OUP.
- Siegel, S. (2010a) 'Do Experiences Have Contents?', in B. Nanay (ed.) *Perceiving the World*, pp. 333–68. Oxford: OUP.
- Siegel, S. (2010b) *The Contents of Visual Experience*. Oxford: OUP.
- Siegel, S. (2012) 'Cognitive Penetrability and Perceptual Justification', *Noûs*, 46: 201–22. <https://doi.org/10.1111/j.1468-0068.2010.00786.x>
- Siegel, S. (2013) 'The Epistemic Impact of the Etiology of Experience', *Philosophical Studies*, 162: 697–722. <https://doi.org/10.1007/s11098-012-0059-5>

- Siegel, S. and Byrne, A. (2017) 'Rich or Thin?', in B. Nanay (ed.) *Current Controversies in Philosophy of Perception*, pp. 59–80. New York: Routledge.
- Smith, J. (2014) 'Are Emotions Embodied Evaluative Attitudes? Critical Review of Julien A. Deonna and Fabrice Teroni's *the Emotions: A Philosophical Introduction*', *Disputatio*, 6: 93–106. <https://doi.org/10.2478/disp-2014-0005>
- Song, H. et al. (2012) 'Brighten Up: Smiles Facilitate Perceptual Judgment of Facial Lightness', *Journal of Experimental Social Psychology*, 48: 450–2. <https://doi.org/10.1016/j.jesp.2011.10.003>
- Stefanucci, J. K. et al. (2012) 'Plunging into the Pool of Death: Imagining a Dangerous Outcome Influences Distance Perception', *Perception*, 41: 1–11. <https://doi.org/10.1068/p7131>
- Storbeck, J. and Stefanucci, J. K. (2014) 'Conditions under Which Arousal Does and Does Not Elevate Height Estimates', *PLoS One*, 9: e92024. <https://doi.org/10.1371/journal.pone.0092024>
- Tappolet, C. (2016) *Emotions, Values, and Agency*. Oxford: OUP.
- Tolstoy, L. ([1882]2008) *A Confession*. London: Penguin.
- Ulzen, N. R. V. et al. (2008) 'Affective Stimulus Properties Influence Size Perception and the Ebbinghaus Illusion', *Psychological Research*, 72: 304–10. <https://doi.org/10.1007/s00426-007-0114-6>
- Vance, J. (2014) 'Emotion and the New Epistemic Challenge from Cognitive Penetrability', *Philosophical Studies*, 169: 257–83. <https://doi.org/10.1007/s11098-013-0181-z>
- Väyrynen, P. (2018) 'Doubts about Moral Perception', in A. Bergqvist and R. Cowan (eds.) *Evaluative Perception*, pp. 109–28. Oxford: OUP. <https://doi.org/10.1093/oso/9780198786054.003.0006>
- Vetter, P. and Newen, A. (2014) 'Varieties of Cognitive Penetration in Visual Perception', *Consciousness and Cognition*, 27: 62–75. <https://doi.org/10.1016/j.concog.2014.04.007>
- Watkins, M. and Jolley, K. (2002) 'Pollyanna Realism: Moral Perception and Moral Properties', *Australasian Journal of Philosophy*, 80: 75–85.
- Werner, P. (2016) 'Moral Perception and the Contents of Experience', *Journal of Moral Philosophy*, 13: 294–317. <https://doi.org/10.1163/17455243-4681063>
- Werner, P. (2018) 'Moral Perception without (Prior) Moral Knowledge', *Journal of Moral Philosophy*, 15: 164–81. <https://doi.org/10.1163/17455243-46810075>
- Werner, P. (2020a) 'Moral Perception', *Philosophy Compass*, 15: e12640. <https://doi.org/10.1111/phc3.12640>
- Werner, P. (2020b) 'Which Moral Properties Are Eligible for Perceptual Awareness?', *Journal of Moral Philosophy*, 17: 290–319. <https://doi.org/10.1163/17455243-20182801>
- Wisniewski, J. (2015) 'The Case for Moral Perception', *Phenomenology and the Cognitive Sciences*, 14: 129–48. <https://doi.org/10.1007/s11097-013-9321-3>