Perception and Intuition of Evaluative Properties

Jack C. Lyons

University of Arkansas

**Abstract:** Outside of philosophy, ‘intuition’ means something like ‘knowing without knowing how you know’. Intuition in this broad sense is an important epistemological category. I distinguish intuition from perception and perception from perceptual experience, in order to discuss the distinctive psychological and epistemological status of evaluative property attributions. Although it is doubtful that we perceptually experience many evaluative properties and also somewhat unlikely that we perceive many evaluative properties, it is highly plausible that we intuit many instances of evaluative properties as such. The resulting epistemological status of evaluative property attributions is very much like it would be if we literally perceived such properties.

Is it possible for us to perceive evaluative properties, such as the moral rightness of some act or the aesthetic beauty of a piece of art? I won’t try to answer this question definitively, in part because I think the answer depends on the answers to a number of empirical questions. However, I want to lay out some reasons to be optimistic about an affirmative answer, and even more optimistic about an affirmative answer to a nearby question. I want to distinguish what we can perceive from what we can have perceptual experience of, and I want to distinguish perception from a more general category, that I will call intuition (using ‘intuition’ in a broader sense than is common in philosophy). I think it is unlikely that we have perceptual *experience* of evaluative properties or their instances as such. It is more likely that we perceive these properties, however, and even more likely that we have perception-like, empirical intuitions of them. The resulting epistemological status of evaluative property attributions is very much like it would be if we actually perceived such properties. Thus, the proponent of the claim that evaluative properties are perceivable is taking on an excessive and unnecessary burden, especially if a perceivable property is taken to be one that is the object of a perceptual experience.

In Section 1, I make some preliminary, clarificatory remarks. Section 2 is concerned with the distinction between perception and perceptual experience, Section 3 with the distinction between perception and intuition in the current sense. In Section 4, I discuss the epistemology of intuitive judgments. In Section 5 I turn to the question of whether we intuit evaluative property instances and argue that, though we would need empirical data for a firm conclusion, it seems likely that we do. In Section 6, I note some important ways in which perception and (other types of) intuition differ both psychologically and epistemologically. In Section 7, I return to the epistemology of intuition and sketch some of the implications of the earlier sections.

**1. Three questions**

Let me start by clarifying the nature of the question about whether we can perceive evaluative properties.[[1]](#footnote-1) There are at least three different versions of the question, only two of which figure into the present concerns.

The *metaphysician’s question* is whether evaluative properties are ‘out there’ in the way that uncontroversially perceptible properties are and causally efficacious in a way that allows us to be appropriately related to them. The *cognitive scientist’s question* is whether the psychological or neural or computational systems or processes or capacities by which we come to form some judgments about evaluative properties are the same as or similar to those involved in perception. The *epistemologist’s question* is whether some beliefs about evaluative properties have the same or similar status as perceptual beliefs and for the same or similar reasons.

My concern here will be with the second and third questions. I’ll formulate them in such a way that they are neutral with respect to the metaphysical question. This means, among other things, that psychological processes and capacities have to be individuated more or less internalistically, at least in the sense that we could determine that an agent is employing a particular capacity without first knowing what kind of environment the agent is in and whether the capacity is getting at the truth or not.[[2]](#footnote-2) It also means that the epistemic status of interest will be justification, rather than knowledge.

This amounts to making substantive assumptions at the outset, e.g., that some kind of nondisjunctivist psychology and epistemology are correct. I won’t try to defend these nondisjunctivisms, but I don’t mind taking them as a starting point. It seems to me that the psychology and epistemology of, say, color vision might possibly be relevant to theories about the ontological status of color, but the links are complex and controversial enough that we can pursue the former while setting aside the latter. Similarly regarding the psychology and epistemology of causal judgment or other minds. We ought to be able to figure out how we do and should come to beliefs about causation, for example, without having to first figure out what causation is. The flipside to this autonomy for our epistemology and psychology, however, is that we’re not going to get a cheap argument for metaphysical realism from them. So even if some kind of direct realist epistemology of moral properties is true, it won’t imply realism about moral properties.

Although I think that the metaphysical question is separable from the other two, I think that the cognitive scientific question and the epistemological question are closely linked. In particular, I hold (as will become clearer later) that the epistemic status of a belief is partly determined by the nature of the process or capacity by which that belief arises. In the present case, there is reason to suspect that some evaluative judgments result from ‘intuitive’ systems/processes/capacities and that these judgments therefore have an epistemic status similar to that of perceptual judgments.

Intuition---in the broad and inclusive sense common everywhere, I think, outside of philosophy---is sometimes described as ‘knowing without knowing how you know’. This is a handy characterization of the phenomenon that I am interested in, although since I’m avoiding the metaphysical questions, we will need to remove the factivity. And to answer the psychological questions, we will need to remove the normativity. A more accurate slogan, then, would be ‘cognizing without cognizing how you cognize,’ but of course, this is too ugly and awkward to actually use. I’ll stick with the easier phrase, but please keep in mind, I’m using ‘knowledge’ the way psychologists frequently do, in a way that implies neither justification, truth, nor belief.

Intuition thus understood is a capacity that delivers judgments in a way that is automatic and, more importantly, doesn’t involve an introspectible train of reasoning.[[3]](#footnote-3) Intuition will include perceptual capacities as well as so-called ‘System 1’ capacities.

**2. Perception vs. perceptual experience**

I will suppose that all introspectible states have a phenomenology, at least in the minimal sense that there’s something it’s like to be in them.[[4]](#footnote-4) There’s something that it’s like to (consciously) believe that *p*, and that’s different from what it’s like to believe that ~*p*. But there isn’t *much* that it’s like. Beliefs and the like don’t have a rich phenomenology, and they don’t have a sensory phenomenology, but if phenomenology is understood merely in terms of what-it’s-like-ness and not in terms of rich qualitative character, then it seems quite plausible to me---insofar as I understand the phrase ‘what it’s like’---that purely cognitive conscious states have an associated phenomenology. I’ll call this a ‘bland’ phenomenology to distinguish it from the rich phenomenology of sensory experience.

If this is right, if perceptual judgments have even a bland phenomenology, then perceptual judgment affects experience. But we may well not want to count that as affecting *perceptual experience* in any interesting sense.

Suppose, for example, that color inversion without doxastic error is possible:[[5]](#footnote-5) you and I have the opposite color sensations, but we both form in response to these sensations the correct belief that the surface in front of us is red. Presumably, what it’s like for me to form the perceptual belief that the surface is red is the same as what it’s like for you. You and I have the same bland phenomenology but different rich phenomenology. However, if we found just the right pair of stimuli (getting the exact right shades of red and green, for example), we would have the same rich phenomenology but different bland phenomenology.

Consider another example, although it is less obviously perceptual: you and I can both visually distinguish mice from shrews when they’re right next to each other. Yet the things you judge to be mice I judge to be shrews, and vice versa. Thus we can have the same rich phenomenology and different bland phenomenology (when we’re both looking at a mouse) or the same bland phenomenology and different rich phenomenology (when I’m looking at a shrew and you’re looking at a mouse).

It is not only perceptual *beliefs* that have bland phenomenology. Even if I am so diffident about my color perception abilities or my mouse-detecting abilities that I’m withholding belief, perception will make it *seem* (i.e., *look*, i.e., *appear*) to me as if there’s a mouse or a green patch present. If you and I are highly skeptical but are looking at green and red patches, respectively, we will again have the same rich phenomenology but different bland phenomenology; even though we are both withholding belief, my patch looks green to me and yours looks red to you, and that makes for a bland phenomenological difference, in contrast with our rich phenomenology, which is the same. The same is true in the case where we are both looking at a mouse, which looks to one of us like a mouse and to the other like a shrew, even though we are both withholding belief.

‘Seem’ and ‘appear’, as well as the modality specific verbs, like ‘look’, ‘sound’, etc. are famously polysemous; the terms all have (among others) a phenomenal sense (according to which, to say that *x* looks *F* is to describe the character of one’s *x*-experience), a comparative sense (where *x* looks *F* just in case *x* looks the way *F* things normally or characteristically look), an epistemic sense (there’s reason to believe that *x* is *F*) and a hedging use (I’m not completely sure that *x* is *F*). Importantly for the present discussion, they also function to attribute certain mental states. They do so ambiguously, however, for they can either refer to the states with bland phenomenology or the states with rich phenomenology. In the color inversion case, for example, things look in one sense the same to us, but they look in another sense different.[[6]](#footnote-6) In what follows, I’ll use ‘looks’, ‘appears’, ‘seems’ and the rest only to pick out the states with bland phenomenology.

The states here with the rich phenomenology are clearly and intrinsically perceptual: they have a spatio-temporal character and are highly modality-specific. Visual experiences, for example, have a distinctive phenomenology that is strikingly different from that of tactile experiences, even when they’re experiences of the same property (e.g., *squareness*). There is no serious doubt that these states count as perceptual experiences. The states with the bland phenomenology, on the other hand, have neither spatio-temporal character nor modality-specificity. I will claim that some states with bland phenomenology should count as genuinely perceptual as well, though this clearly cannot be in virtue of their intrinsic character, since the intrinsic character doesn’t have any distinguishing marks that sets a state off as, e.g., visual, rather than auditory, or even inferential. The visual belief that *p* is not intrinsically or phenomenally different from the auditory belief that *p*. The same thing strikes me as true regarding the bland seeming states just described: there is nothing *phenomenally* visual about the state you and I share when the single patch looks red to us both.

This is not to deny that perceptual appearances or judgments might have a kind of phenomenology that distinguishes them from some other mental states; they might have a feel of ‘forcefulness’ that some beliefs---e.g., voluntary beliefs, if there are such things---lack. To the extent that this forcefulness provides perceptual states with anything approaching rich phenomenology, however, it is quite unlike the rich phenomenology just discussed, for it is unconnected to the contents of those judgments or appearances. Whatever presentational or assertoric feel or forcefulness these perceptual states have, it is common to them all (even if varying in intensity), irrespective of content or sense modality. The rich phenomenology of visual redness, however, is very different.

So then, what does make a state with bland phenomenology a perceptual state? A plausible answer is that what is distinctively perceptual here is the nature of the process(es) by which that state comes about.[[7]](#footnote-7) A belief or appearance is a perceptual belief or appearance just in case it results from a perceptual process, or perceptual capacity, or perceptual module[[8]](#footnote-8). The processes that produce perceptual judgments are fast, effortless, automatic processes whose operations are triggered by the activity of sense transducers. They are more or less ‘modular,’ in Fodor’s sense;[[9]](#footnote-9) most importantly, they are relatively resistant to the influence of the beliefs and goals of the larger organism, and they operate in a way that, though involving a great deal of subpersonal inference, hides this fact from introspection: their outputs are not the result of an introspectible train of reasoning.

There is therefore an important asymmetry between the rich states and the bland states. What makes a rich state a perceptual state is presumably its intrinsic character; what makes a bland state a perceptual state, however, is its causal history. Another important difference is closely related: the states with rich phenomenology are essentially phenomenological, while the states with bland phenomenology are only contingently so. Two zombies, for example, could not undergo the color inversion described above. Perceptual beliefs, on the other hand, could clearly be unconscious, and the same, I think, is true of looks/appearances/seemings, even though these standard terms tend to suggest otherwise. I could be unconsciously perceiving the Müller-Lyer lines; if my visual system works normally even in these conditions, the one line would still look longer than the other, whether or not I (unconsciously) believed so. (This will become more plausible in the next section, when I elaborate on the nature of these looks/seemings/appearances.)

Thus I’ll use the term ‘perceptual experience’ in a narrow way, to include the states with rich phenomenology but not the states with bland phenomenology. Perceptual beliefs and appearances are perceptual states in that they have a perceptual etiology; they’re just not perceptual experiences in any robust sense of ‘experience’. But mustn’t perceptual appearances be experiences if they’re conscious states that aren’t beliefs? I’m inclined to answer yes, these bland states are experiences---at least in the sense that they have some, albeit bland, phenomenology---and yes, they’re perceptual, but to simultaneously insist that they’re not really *perceptual experiences* in any ordinary or reasonably interesting sense of the term, largely because---unlike perceptual experiences proper---what makes them experiences (they’re conscious but not beliefs) has nothing to do with what makes them perceptual (their causal history). So they’re perceptual, and they’re experiences, but they aren’t perceptual experiences. Now in part this is a terminological stipulation, but it is also a substantive position: there’s an important difference between those states that count as perceptual in virtue of their experiential aspects and those that count as experiential in virtue of their etiology. Despite superficial appearances, however, it is not an incoherent position.

The high-level content view of perception holds that perception doesn’t only represent low-level properties like shape, color, surface orientation, and the like, but also high-level properties, which could include kind properties, historical properties, semantic properties, and perhaps others.[[10]](#footnote-10) High-levelists sometimes say that high-level properties are represented in perceptual *experience*. If this is simply the view that high-level properties are represented by conscious perceptual *states*, including perceptual beliefs and appearances/seemings, then I concur (some reasons for this will be given below). However, if it’s the view that high-level properties are represented by perceptual experiences in the current sense of states with rich phenomenological character, then I object. Sometimes differences in perceptual judgment, e.g., between experts and novices, are accompanied by differences in rich phenomenology, but the most obvious cases of this are cases where the rich experiential difference is only causally linked to the high-level (i.e., appearance or judgment) difference, rather than constitutive of it. Expert ornithologists and anthropologists and the like probably attend to different features of distal stimuli, which might produce a difference in rich phenomenology. Yet even if I were to accidentally attend in just this way, and thus have the same rich phenomenology as an expert, I would still have no clue that the thing I was looking at was, say, part of a femur of *P. boisei*, or a one year old female pileated woodpecker. Thus, I would neither perceptually judge nor would it perceptually seem to me that there’s a *P. boisei* femur, or a pileated woodpecker, in front of me.

So is the view I’m articulating a high-level view or not? It is a high-level view about the contents of perception, but not a high-level view about the contents of perceptual *experience*, understood the way I’m understanding ‘perceptual experience’ here. I’m not sure how high-levelists typically understand the term, and maybe this is roughly what they’ve had in mind all along.[[11]](#footnote-11) One important difference between my view and standard versions of high-levelism[[12]](#footnote-12) is that mine is not, and couldn’t very well be, defended on phenomenological grounds. There’s nothing distinctively perceptual about the (bland) phenomenology of high-level perceptual states. There is an argument for thinking these states are perceptual, but it can only be an empirical argument concerning the cognitive mechanisms involved in the production of these states.

**3. Perception and Intuition**

I’ve insisted that what makes a certain judgment a perceptual judgment is the nature of the process that gives rise to it, not its phenomenology. The processes that give rise to perception are fast, effortless, automatic, more or less modular processes, triggered by sense transducers. They are highly encapsulated and inferentially opaque. The ‘more or less’ and ‘highly’ hedges are quite deliberate here. If in order to count as modular, a process needs to satisfy all of Fodor’s nine diagnostic features of modules (speed, shallowness, innateness, domain specificity, mandatory operation, encapsulation, characteristic breakdown, fixed neural architecture, introspective opacity), or if these nine are interpreted in a very strict way, then I don’t want to claim that perceptual processes/systems are modular.[[13]](#footnote-13) I especially don’t want to make any claims about innateness, or (as this would beg soon-to-be central questions) shallowness.

Being inferentially opaque and being highly encapsulated are essential to my view; they require elaboration and qualification. To say that a system is informationally encapsulated (aka ‘cognitively impenetrable’) is to say that it does not take the beliefs, desires, expectations, or other ‘cognitive’ states of the larger organism as inputs. When I say that perceptual systems are ‘highly’ encapsulated, I mean that perception is largely, even if not strictly, cognitively impenetrable. The empirical and theoretical debate about informational encapsulation and cognitive penetration centers on the question of whether an extremely rigid version of the encapsulation hypothesis is true.[[14]](#footnote-14) Whatever the outcome of this debate, we can’t lose sight of the striking fact that perception is *highly* encapsulated. It is uncontroversial that we can’t just see whatever we want, that imagination has little if any effect on perceptual experience, that perception quite frequently violates our antecedent expectations, etc. This explains the persistence of known illusion: I know the stick in the water is straight, but it continues to look bent; I am firmly convinced that the lines of the Müller-Lyer illusion are the same length, but one of them looks longer. For very good reasons, there are heated debates in philosophy and the cognitive sciences about whether perception is ever penetrated by cognition. But the mere fact that this is a live debate is a testament to how generally resistant (even if not impervious) to penetration perception is. We can’t simply see whatever we want or fear or expect, and this is a central and foundational fact about perception. This is what is meant by claiming that the processes are highly encapsulated.

When I say that they are inferentially opaque, I mean that the outputs of the perceptual systems are, as BonJour calls them, ‘cognitively spontaneous’: not the result of an introspectible train of reasoning.[[15]](#footnote-15) Although perception is certainly a kind of Helmholtzian inference, it doesn’t introspectively seem to be. We are often unaware of either the cues we are relying on or the processing that transforms these cues into higher-level information. Some cues, as in auditory localization, are simply unconscious. Other cues, as in visual perception of depth or 3-D shape, are conscious, but their significance for perceptual processing tends to be unknown except by artists and perceptual psychologists. Most untutored adults (and certainly children) do not know what aerial perspective is, for example, or how it serves as a cue to distance; things just look far away, and they’re not sure why.

The end result of perception being modularized in this way is that we perceivers find ourselves with specialized subpersonal mechanisms that perform tasks for us that we are usually not capable of performing for ourselves. Even if we had at our disposal and were capable of taking in all the information that serves as input to our perceptual modules, we would not be able to infer from all this what kind of distal layout was being presented to us. We would certainly not be able to do it in real time, but probably not ever, since we don’t generally appreciate the significance of the various cues.

In other work I used the term ‘identifications’ to refer to the high level, conceptual content, outputs of modular perceptual processes.[[16]](#footnote-16) They have bland phenomenology when conscious, the rich phenomenology being attached to the lower level states. These outputs represent objects as standing in various relations to each other, having certain properties, and belonging to certain categories. Exactly which relations, properties, and categories is a difficult empirical question. These high level outputs are typically beliefs. Sometimes, however, as when we believe appearances are illusory, we don’t form judgments, but things continue to look, or seem, or appear a way that corresponds to the judgment we would have unreflectively made. These identifications are mere appearances/seemings/looks.[[17]](#footnote-17)

Perceptual identifications are a species of a more inclusive genus. Intuition, again, is a capacity to ‘know without knowing how you know’. This capacity (or, more likely, cluster of capacities) is subserved by so-called ‘System 1’ processes: they are fast, automatic, effortless, and more or less modular.[[18]](#footnote-18) They needn’t be triggered by the operation of sense transducers and are often more sensitive to the agent’s occurrent beliefs than perceptual systems are, but otherwise are quite similar to perception. There is reason to think that we have intuitive processes for making probability estimates, predicting stock performance, evaluating the validity of an argument, assessing the desirability of various bets, and so on.[[19]](#footnote-19)

Some of these processes take beliefs as inputs; some don’t. Because I am interested in perception and perception-like capacities, I will focus on the latter. It is frequently difficult to tell, however, whether or not a given process is taking beliefs as inputs, in part because it is difficult to precisely specify the content of the output. A given process, for instance, might be delivering ‘*x* is a qualified candidate’ on the basis of beliefs about x’s work experience, or it might be delivering ‘a candidate with *x*’s work experience is qualified’ without taking any beliefs as input.

I will use the term ‘intuition’ broadly, to include any of these fast, automatic, modular processes. So it includes perception, but also *a priori* intuition, as well as capacities for the noninferential formation of empirical judgments, provided that all of these result (as seems plausible) from the kinds of cognitive systems described above. ‘Intuition**s**’ will refer to the high-level, conceptual content outputs of these systems. Some but not all of these will be beliefs; one can have the intuition that *p* without believing that *p*. The persistence of cognitive illusions is similar to, though sometimes less robust than, the persistence of perceptual illusions. Even though I understand framing effects, there is still a part of me that would rather suffer a disease with a 90% survival rate than one with a 10% mortality rate; even though I know about the conjunction rule for probabilities, I’m still somewhat tempted to think that Linda is more likely to be a feminist bank teller than simply a bank teller.

In subsuming perception under intuition, I am claiming that perception involves a kind of knowing without knowing how you know. But is this right? The perceptual experience, after all, seems to provide evidence in support of the perceptual judgment. I’m inclined to think of this as an ‘illusion of evidence,’ and like other illusions, I am subject to it myself, even though theoretical considerations convince me to the contrary. Experiences *appear* to provide evidence for perceptual judgments, but this appearance is probably the result of something like the hindsight bias in social psychology: once you know what the outcome was, that outcome seems to be predictable from the prior data, even if it wasn’t at all predictable at the time.[[20]](#footnote-20) In the perceptual case, we ‘know the outcome’ by knowing which perceptual identification matches up with the experience, and so the content of the identification seems to be easily derived from the perceptual experience. But this is only because we are so good at moving from the experience to the identification, and we are only good at it because we have special machinery for doing so. As discussed above, if the novice were to have the expert’s visual experience of a pileated woodpecker, she would have no idea what kind of bird she was seeing. Thus, there may well be less evidence available for perceptual judgment than it initially would seem.[[21]](#footnote-21)

**4. Two Epistemologies of Intuitive Judgment**

The epistemologist’s question from section 1 was whether some beliefs about evaluative properties have an epistemic status similar to that of perception. This is only an interesting question on the assumption of an epistemology that grants some kind of special, or at least interesting, status to perception. (On coherentism, for example, all beliefs have the same---inferential---status, so the answer to the epistemologist’s question is trivial.)

It is illustrative to compare a standard internalist version of modest foundationalism with the externalist version I prefer. I won’t try here to argue for or against either view. Both are modest foundationalist views in that they hold that beliefs about the external world can be epistemologically basic---i.e., can be (*prima facie*) justified even in the absence of evidential support from other beliefs.

On the externalist view, the outputs of the more or less modular systems described above---when those modules are not taking beliefs as inputs---are basic and therefore immediately justified, without needing support from other beliefs. I want to insist on a reliabilist component as well, so that the intuitive processes yield justification only if reliable. Contrast this with an internalist view that holds that its seeming to *S* as if *p* is sufficient to give *S* *prima facie* justification to believe that *p*.[[22]](#footnote-22)

Both views have minimal cognitive and metacognitive requirements for justification. So, unlike coherentist and classical foundationalist theories, these don’t require the agent to distinguish her beliefs from the reality they purport to describe or to have justified metabeliefs about the reliability of her perceptual processes. Both thereby allow animals and small children to have justified beliefs.

The externalist view, however, is more demanding than the internalist view in several respects. First, there are fewer intuitions in the present sense than there are seemings as the internalist theory views them.[[23]](#footnote-23) All (conscious) intuitions are seemings, though not all seemings are intuitions; intuitions need to have the right causal history, while seemings don’t. Further, not all intuitive beliefs are going to be the result of a reliable process, so they won’t all be *prima facie* justified. Those who are impressed by the claims of epistemic irrationality coming out of the heuristics and biases tradition in social psychology[[24]](#footnote-24) may welcome this reliabilist requirement. What’s wrong with these ill-formed judgments we naturally and intuitively make is not that they are formed in the absence of the relevant metabeliefs (i.e., that they were nonbasic and in need of further inferential support, which they then failed to receive), but that they result from unreliable heuristics. They might have been justified even without these higher order beliefs, if only they’d been the result of a better (i.e., more reliable) heuristic.

Higher order introspective knowledge about the nature of our intuitions is harder to come by on the externalist view than on the internalist view. Reliability, of course, is not something one can determine by introspection. But neither is whether a given spontaneous judgment is strictly speaking intuitive, as this is a matter of causal history. The point concerns not just beliefs or seemings that have popped into one’s head from nowhere (though the internalist and externalist views will classify these differently), but it is also difficult to determine introspectively whether a given judgment/seeming is perceptual/intuitive or post-perceptual/intuitive. When I hear the rain hitting my roof, I immediately form the belief that the seats in my Jeep are getting wet, without consciously forming the beliefs that the top is down, or that it’s raining, or that if the top is down and it’s raining then the seats are getting wet. The belief that the seats are getting wet is neither perceptual nor basic. It is psychologically immediate, but it is clear that it depends causally and epistemically on these other beliefs.[[25]](#footnote-25) Psychological immediacy doesn’t indicate intuitive status.

This bad news about higher order knowledge on the externalist view is balanced by good news: although we can’t rely very heavily on introspection to reveal the epistemic status of a given belief, introspection is no longer our only tool for doing so. We can, on the externalist view, bring the full power of empirical cognitive science to bear on these questions. Introspection is notoriously unreliable and notoriously subjective, and if you and I have a different introspective sense of the contents of our seeming states, we’re pretty much at an impasse, for it’s not at all clear how to adjudicate such a disagreement. But there is a feasible (even if far from trivial) empirical route to settling corresponding questions and disagreements about the contents of intuitions.

**5. Do we form intuitive, perception-like judgments about evaluative properties?**

Do we perceive evaluative properties? This remains a difficult question to answer, for reasons considered above. First, it is at least three different questions: the metaphysician’s, the cognitive scientist’s, and the epistemologist’s question. Second, even if we focus on, say, the cognitive scientist’s question, what we are left with might be the question whether we have perceptual *states* that represent evaluative properties, or it might be the question whether we have perceptual *experiences* of evaluative properties. Although I’m not sure how to go about answering this last question, I have suggested that the answer to this second-to-last question is an empirical question, since it depends on facts about the etiologies of the states in question. Because it’s empirical, I can’t give it a definitive answer here. But there are general reasons to be optimistic about a positive answer to it, and thus reasons to be optimistic about the outlook for evaluative perception (i.e., for the perception of evaluative properties).

The distinction between perception and perceptual experience is good news for evaluative perception, because such properties don’t seem, pretheoretically, to be objects of perceptual experience. But this is no obstacle to them being objects of perception, if perception includes more than perceptual experience. In general, anything that is good news for a high-level view about the contents of perception is good news for evaluative perception, and the distinction between perception and perceptual experience, as drawn above, is good news for high-levelism. Similarly, if intuition is a more inclusive category than perception, but one that has an importantly similar psychological status and carries the same epistemic benefits, then some evaluative judgments are that much more likely to enjoy the special epistemic status of perception.

It is no surprise, for instance, that Hume’s views about the perception of causation and about the perception of virtue and vice were similarly restrictive:

When we look about us towards external objects, and consider the operation of causes, we are never able, in a single instance, to discover any power or necessary connexion; any quality, which binds the effect to the cause, and renders the one an infallible consequence of the other. We only find, that the one does actually, in fact, follow the other. The impulse of one billiard ball is attended with motion in the second. This is the whole that appears to the outward senses.[[26]](#footnote-26)

Take any action allow’d to be vicious: Wilful murder, for instance. Examine it in all lights, and see if you can find that matter of fact, or real existence, which you call vice. In which-ever way you take it, you find only certain passions, motives, volitions and thoughts. There is no other matter of fact in the case. The vice entirely escapes you, as long as you consider the object. You never can find it, till you turn your reflexion into your own breast.[[27]](#footnote-27)

Hume’s reasoning here is tempting, but it will be thought question begging by anyone who holds that we perceive causal relations or moral properties, for one could simply insist that yes, we do perceive cause, and so the conjunction of the motions of the two balls is simply not ‘the whole that appears to the outward senses’. Similarly for ‘matters of fact’ regarding vice.[[28]](#footnote-28)

Two different factors contribute to the initial plausibility here. One is that Hume seems to assume that the alternative view would have to be committed to the perception of highly superordinate/determinate, rather than subordinate/determinable properties, e.g., that it would be perception of *vice*, rather than *selfishness*; *power*, rather than *kicking*. Second, Hume seems to equate perception with perceptual experience, so that its contents would have to be limited to spatio-temporal properties that have distinctive, modality-specific phenomenology.

Even if Hume is right that we don’t perceive or intuit superordinate properties, we might still perceive or intuit subordinate properties. Thus, while it seems right that we don’t perceive causes as such, it also seems that we do perceive certain determinate types of cause as such. For example, I can see that *x* is kicking *y*, or I can feel that *z* is burning me. Similarly, even if it’s implausible that we perceive the wrongness of burning the cat, we might instead perceive the sadism, from which we could infer wrongness. It is often the case that we perceive relatively subordinate categories without perceiving the superordinate ones. Thus, the object looks like a chair to me, not like furniture; the surface doesn’t look colored, but rather looks red; this looks like an insect without looking like an animal; and so on. The superordinate property is easily and quickly inferred from the subordinate one, but that’s now inference and not perception or intuition. These claims are all the more plausible in the context of the view that what an intuition is, is an output of a modular process. There’s no reason to think that perceptual modules couldn’t be aimed at a fairly high level of specificity, representing their objects at relatively subordinate levels, without also or instead representing them at superordinate levels.

In any case, there are no *a priori* constraints concerning at what level of generality the modules would have to couch their outputs; this increases the number of ways in which intuition might represent evaluative properties.

We have already seen how Hume’s equating perception with perceptual experience puts evaluative perception at an unfair disadvantage. Perception is more inclusive than perceptual experience, and intuition is more inclusive than perception. So even if evaluative or other high-level properties are not plausibly represented in perceptual experience, it is more plausible that they are represented in perception, and even more plausible that they are represented in intuition.

Insofar as our concerns are epistemological, we get as much out of the claim that a certain property is intuitable as we would out of the claim that it is perceptible; and by focusing on intuition rather than perception, we further divest ourselves of a significant but unnecessary argumentative burden. There are a number of processes whose status as perceptual is controversial, but whose status as intuitive is unproblematic. Fodor famously classified language comprehension as a perceptual capacity.[[29]](#footnote-29) Now, speech perception (forming judgments of the form ‘S said “it’s raining”’) is obviously perceptual, but Fodor meant judgments of the form ‘S said *that* it’s raining’. It’s not clear what Fodor means by calling these latter judgments perceptual, but there’s no question that they’re intuitive. Similarly, chess experts are sometimes said to ‘see’ that the opponent has certain weaknesses, etc.[[30]](#footnote-30) We can be fairly sure that these judgments are intuitive, whether they are perceptual or not. Turning to the evaluative domains, mind reading---third person mental state attribution---may or may not be perceptual, but again, the judgments are uncontroversially intuitive. This last case is especially important for the present purposes, for it is plausible that the mindreading systems deliver intuitions involving *cruelty*, *sadism*, *generosity*, *bravery*, *cowardice*, *wisdom*, *knowledge*, and other ‘thick’ evaluative concepts.[[31]](#footnote-31)

Then there are intuitive processes that no one would think are perceptual but which seem to yield evaluative judgments. There is evidence that we have intuitions about how valuable this stock is, how qualified this current or potential employee is, whether a particular argument is cogent, which of two bets is better, among others.[[32]](#footnote-32) If we care for epistemological reasons about the perception of evaluative properties, and if the epistemology of intuition mirrors that of perception, the fan of evaluative perception is well advised to broaden the view to include intuition as well.

**6. Beliefs and basing**

The special epistemic status of intuitive judgments is a matter of these judgments being epistemologically basic, but this is only true in cases where the relevant systems are not taking beliefs as inputs. Nonperceptual intuition, however, is far more sensitive to background beliefs than perception. This poses two related threats to the current project. First, if the influence of beliefs is rampant, then the processes in question cease to be significantly modular, and their outputs cease to count as intuitions. Second, if these processes are taking beliefs as inputs, then their outputs aren’t epistemologically basic.

Even if nonperceptual intuition is more cognitively penetrable than perception, cognitive illusions tend to persist in much the same way that perceptual illusions do, and this shows that the relevant processes have limited access to the cognitive states of the larger organism. This is enough for the level of modularity I require. The second challenge requires a lengthier and more complicated response. In particular, it requires clarification of what’s meant by claiming that a system is taking beliefs as inputs. I will claim that the kind of taking-as-inputs involved in cognitive penetration is different from the kind of taking-as-inputs involved in inference.

There are independent reasons for thinking that the cognitive penetration of perception does not thereby render perception epistemically inferential. Suppose I’m hiking in the woods and believe for terrible reasons (or none at all) that there are a lot of snakes nearby.[[33]](#footnote-33) (Fill in the psychological details in whatever way is needed to ensure that it’s a genuine case of cognitive penetration.) Suppose further that this unjustified belief penetrates perception in one of two ways. It might

1. cause me to generate a lot of false positives, mistaking sticks and roots for snakes, or it might
2. make me better at spotting the snakes that are actually in my environment, without the false positives.

The contrast is important, because while case (a) is one where cognitive penetration reduces perceptual justification, case (b) is not; my resulting perceptual beliefs are justified, *even though the penetrating belief was completely unjustified*. This latter feature, however, is a mark of nonevidential influence of belief. Nothing that is *un*justified can confer evidence. But here, in case (b), there are beliefs that I wouldn’t have had, had I not believed that the woods around me were full of snakes. So my perceptual beliefs causally depend on this unjustified belief, but since they’re justified anyway, they must not depend *evidentially* on that belief.

But how do we make sense of this? Here’s a proposal: in these sorts of nonevidential cases, the belief is affecting processing but is not doing so *qua* belief. The belief that *p* is not being used by the receiving system as a premise; the fear that *p* or a vivid conception that *p* would have the same or similar result. That is, the propositional attitude of believing that *p* influences processing within the system, but it does so in virtue of the *content* of that attitude and not in virtue of the attitude *type* (e.g., belief, desire, fear, etc.). There are various mechanisms by which this might happen: perhaps specific high-level object templates (e.g., snake templates) are activated in advance of sensory activity. Those who prefer a Bayesian framework could view this sort of cognitive penetration as working by modifying priors (e.g., increasing the prior for the hypothesis that the current object is a snake). The latter sounds somehow more evidence-involving, but there’s actually no conflict between these two proposals; the template account is one possible implementation of the prior raising account. Priors can get raised for all kinds of reasons, evidence being just one of them, with fear, interest, and idle curiosity being others. We will of course eventually want to know the mechanism by which real cases of cognitive penetration occur, but this won’t help us much in settling the current worries. Whether a system is using a belief qua belief is not determined by the mechanism, but by counterfactuals about what effects might have been had by other propositional attitudes with the same content.

In any case, and independent of my current proposal to reconcile basic beliefs with cognitive penetration, we will all need some way to understand taking beliefs as inputs while not taking them *qua beliefs* as inputs. My first order belief that *p* is an input to the introspective process whereby I come to believe that I believe that *p*, but this higher order belief does not depend for its justification on the first order belief’s being justified. Anyone who wants to hold that introspective beliefs are epistemologically basic will need some solution to this problem. If it’s better than the one I’ve just sketched, I would be happy to try to co-opt that solution instead of the one I’ve just offered, to explain how cognitively penetrated beliefs might remain basic.

Some of the more common doxastic influences on intuition seem to leave the intuitions basic, on the view just sketched. When evaluating the quality of a college professor, your intuition is affected by your beliefs about the instructor’s gender.[[34]](#footnote-34) In the moral realm, your judgments are influenced by (your knowledge that there are) dirty pizza boxes nearby.[[35]](#footnote-35) In these cases, it is plausible that these beliefs are having their effects without functioning as beliefs, in which case, they don’t threaten the intuitive status of these judgments, and the penetrating beliefs’ justificatory status doesn’t affect the justificatory status of the intuitions. In the latter case, especially, it is likely that verbally convincing the subject that there are dirty pizza boxes nearby would have much less of an effect on her moral judgments than would presenting her with what she knew to be holographic images of dirty pizza boxes (in fact, the literature generally takes the effect to be one of the *emotion* of disgust on moral judgment). If so, then it is a particular vivid representation of dirty pizza boxes that is doing the work, not a belief per se.

Nonperceptual intuition is more sensitive to the agent’s other beliefs than perception is. Some of this is because these intuitive processes are central, rather than peripheral, stimulus-driven processes. These processes may therefore be designed to take beliefs qua beliefs as inputs. Some of this sensitivity, however, is likely the result of beliefs influencing processing in a way that is independent of attitude type. That is, nonperceptual intuitive processes may simply be more cognitively penetrable than perceptual ones.

Obviously I have made a number of empirical assumptions here, in particular about what counterfactuals are true in cases of cognitive penetration of intuition. These assumptions might turn out not to be true. As with any empirically vulnerable work in philosophy, were these assumptions to prove false, I would have the options of (i) biting the bullet and taking it as a discovery---in this case, claiming that the beliefs in question aren’t epistemologically basic after all, (ii) tweaking or abandoning my theory, or (iii) trying to find a way to argue that my theory is actually compatible with the empirical finding after all, despite initial appearances to the contrary. Clearly, choosing among these is impossible in the absence of a specific problematic empirical finding.

**7. Epistemology, again**

At the very beginning of this paper, I set aside the metaphysician’s question to address the cognitive scientist’s and the epistemologist’s questions, which I claimed were closely related to each other but relatively independent of the first. But then in Section 4, I introduced a reliabilist epistemology. It was one of two options on the table, but it was the more demanding option, so it would be especially nice if the reliabilist epistemology can make room for evaluative perception. But how can the metaphysics not matter in the context of reliabilism? If there aren’t any evaluative properties, then judgments attributing them won’t be true, and they won’t be reliably formed.

This may pose a problem for indicator reliabilism, but according to *process* reliabilism (the kind of reliabilism I had in mind above), it’s the reliability of the process that determines justification. The more nonevaluative judgments a given process is responsible for, the less it matters for the reliability of that process whether realism about the relevant evaluative property is true. For example, I suggested above that moral epistemology might get a foothold from thick ethical judgments that are basically justified in virtue of resulting from a modular mindreading capacity. If so, then the processes responsible for our intuitions about lewdness, rudeness and the like are the same processes responsible for our intuitions about sadness, shyness, and the like, and there is little reason why these processes couldn’t feasibly be reliable, even if there aren’t really any evaluative properties. Even if this means that there’s no such thing as rudeness, and even if this means that judgments attributing rudeness are therefore false, the mindreading processes might be responsible for enough other, true beliefs, that they are still reliable and still confer justification.

We would need to know more about the kinds of processes involved in other sorts of evaluative intuitions to know whether the same might apply to them, but it is a promising possibility. Again, the intention here was not to argue for anything decisive regarding evaluative judgments but only to show that (and how) there might be some grounds for optimism.

In all, I take the case for evaluative perception (or intuition, at least) to be a rather hopeful one. There is already good empirical reason to think we have intuitions about several evaluative properties (e.g., argument cogency, strength of candidates, values of bets), and I predict that empirical data will significantly expand this list by revealing that we have intuitive mindreading capacities that deliver judgments about thick ethical properties. Although it may be unlikely that any of these properties are represented in perceptual *experience*, I have argued that they are more likely to be represented in perceptual seemings and judgments, and more likely still to be represented in intuition. This has much the same epistemological significance as the claim that we can perceive evaluative properties, since, on the most plausible views that accord perception a distinctive epistemic status, intuition, as understood here, shares it.[[36]](#footnote-36)

Jack C. Lyons is Professor of Philosophy at the University of Arkansas. His research is mainly in epistemology, cognitive science, and philosophy of mind. He has a recent book on Oxford University Press, entitled *Perception and Basic Beliefs*, and is the editor for the journal *Philosophical Topics.*

1. Throughout, ‘perception of property *P*’ should be understood as shorthand for ‘perception as of something’s being an instance of *P*’. [↑](#footnote-ref-1)
2. For a very different use of ‘capacity’, see Alan Millar, ‘How Visual Perception Yields Reasons for Belief’, *Philosophical Issues* 21 (2011), 332-351; Susanna Schellenberg, ‘Experience and Evidence’, *Mind* 122 (2013), 699-747. [↑](#footnote-ref-2)
3. I take ‘judgment’ and ‘belief’ to be pretty much equivalent, though the former term seems to me to better connote occurrent tokening, while the latter term is often used to describe dispositional or standing states of the cognizer. [↑](#footnote-ref-3)
4. This, of course, is controversial. See Tim Bayne and Michelle Montague, ‘Cognitive Phenomenology: An Introduction’, in Tim Bayne and Michelle Montague, eds. *Cognitive Phenomenology* (New York: Oxford University Press, 2011) for an overview. [↑](#footnote-ref-4)
5. Some theorists who endorse externalist accounts of phenomenal character (Fred Dretske, *Naturalizing the Mind* (Cambridge, MA: MIT Press, 1995); Christopher Hill, *Consciousness* (Cambridge: Cambridge University Press, 2009); Michael Tye, *Consciousness, Color, and Content* (Cambridge, MA: MIT Press, 2000)) will claim that *systematic* inversion without error is possible, on the grounds that the sensations are individuated by their contents, which are determined by the features of external objects. Thus the same thing couldn’t *always* look, say, red to me and green to you. Any externalist theory worth taking seriously, however, must allow for the possibility of misrepresentation and thus must allow for the possibility of one-off inversion without error, which is all the current discussion requires. In any case, I invoke inversion here simply to illustrate the difference between rich and bland phenomenology; it doesn’t even have to be possible to serve that purpose. [↑](#footnote-ref-5)
6. Jack Lyons, ‘Perceptual Belief and Nonexperiential Looks’, *Philosophical Perspectives* 19 (2005), 237-256. [↑](#footnote-ref-6)
7. Op. cit.; Jack Lyons, *Perception and Basic Beliefs: Zombies, Modules, and the Problem of the External World* (New York: Oxford University Press, 2009). [↑](#footnote-ref-7)
8. I am not assuming that these are equivalent; however, they turn out to be roughly coextensive (close enough, at least, for present purposes): a belief that comes out of a perceptual module is one that results from a perceptual capacity, and is one that results from a perceptual process. [↑](#footnote-ref-8)
9. Jerry A. Fodor, *Modularity of Mind* (Cambridge, MA: MIT Press, 1983). [↑](#footnote-ref-9)
10. Tim Bayne, ‘Perception and the Reach of Phenomenal Content’, *Philosophical* *Quarterly* 59 (2009), 385-404; Susanna Siegel, *Which Properties are Represented in Perception?* In Tamar S. Gendler & John Hawthorne (eds.), *Perceptual Experience* (Oxford: Oxford University Press, 2006), 481—503; Susanna Siegel, *The Contents of Visual Experience* (Oxford: Oxford University Press, 2010). [↑](#footnote-ref-10)
11. In the past (Jack Lyons, ‘Clades, Capgras, and Perceptual Kinds’ *Philosophical Topics* 33 (2005a), 185-206), I have taken the current view to conflict at least with Siegel’s version of the high-level view, in part because her argument for high-levelism crucially involves denying that the overall phenomenological difference between the expert and the novice is due to a difference in cognitive phenomenology, where she assumes that the only states with the relevant phenomenology would have to be beliefs (for all intents and purposes) or mere entertaining of propositions. Appearances, as here described, do not seem to be on her radar. Indrek Reiland presses this objection to her in greater detail in ‘On Experiencing High-Level Properties’, *American Philosophical Quarterly* 51 (2014), 177--187. It is possible, however, that she means for appearances/seemings/looks to be counted as experiential, despite their having only a bland phenomenology. If so, then her neglect of appearances is benign, and our views are compatible. [↑](#footnote-ref-11)
12. E.g., Siegel, *The Contents of Visual Experience*. [↑](#footnote-ref-12)
13. Jerry A. Fodor, *Modularity of Mind* (Cambridge, MA: MIT Press, 1983). The term ‘module’ has a complicated history in philosophy and in cognitive science. In some circles, it is only used to pick out systems that satisfy these nine constraints, all read quite restrictively. In other circles (e.g., Peter Carruthers, *The Architecture of the Mind: Massive Modularity and the Flexibility of Thought* (Oxford: Clarendon Press, 2006); Jack Lyons, ‘Unencapsulated Modules and Perceptual Judgment’, In Athanassios Raftopoulos and John Zeimbekis (ed.), *Cognitive Penetrability* (Oxford: Oxford University Press, forthcoming)), it is used quite broadly, to apply to any functionally independent cognitive system or subsystem. In this latter sense, it is an open question whether a particular module is ‘modular,’ where this latter term could be used in the restrictive sense of satisfying all those nine criteria or in the somewhat relaxed sense I am employing here in the text. Fodor’s early work on the subject allowed that these features could come in degrees, but as he defended his view (Jerry A. Fodor, ‘A Reply to Churchland's “Perceptual Plasticity and Theoretical Neutrality”’, *Philosophy of Science* 55 (1988), 188—198; Jerry A. Fodor, *The Mind Doesn't Work That Way: The Scope and Limits of Computational Psychology* (Cambridge, MA: MIT Press, 2000)), the criteria became stricter and more rigid, resulting in a less plausible theory about the mind. The more demanding criteria for modularity are likely never satisfied, but this should not obscure the genuine insight of Fodor’s original view, which goes beyond mere functional independence and claims that most of the nine features are manifested to an interesting extent in a number of cognitive systems. I discuss this further in my ‘Unencapsulated Modules and Perceptual Judgment’. [↑](#footnote-ref-13)
14. Op. cit.; Fiona Macpherson, ‘Cognitive Penetration of Colour Experience: Rethinking the Issue in Light of an Indirect Mechanism’, *Philosophy and Phenomenological Research* 84 (2012), 24-62; Zenon Pylyshyn, *Seeing and Visualizing: It's Not What You Think* (Cambridge, MA: MIT Press, 2003); Raftopoulos, Athanassios, *Cognition and Perception: How Do Psychology and Neural Science Inform Philosophy?* (Cambridge, MA: MIT Press, 2009); Dustin Stokes, ‘Cognitive Penetration and the Perception of Art’, *Dialectica* 68 (2014), 1--34. [↑](#footnote-ref-14)
15. Laurence BonJour, ‘Can Empirical Knowledge Have a Foundation?’ *American Philosophical Quarterly* 15 (1978), 1-14. [↑](#footnote-ref-15)
16. ‘Perceptual Belief and Nonexperiential Looks’; *Perception and Basic Beliefs.* [↑](#footnote-ref-16)
17. I am trying to remain neutral here on the relation between perceptual judgments and perceptual appearances. Though judgement and appearance are clearly distinct types, nothing I have claimed here is incompatible with their being token identical. In fact, I have argued elsewhere (in *Perception and Basic Beliefs*) that in the normal case, where I accept appearances at face value, the appearance *is* the belief: the perceptual system delivers a representation that *p*, and this representation takes on a functional role appropriate to belief: it is allowed as a premise in theoretical and practical deliberation, etc. In other cases, however, that very same representation might take on a more restrained functional role, making it a mere appearance. Nothing in this paper will hinge on this perhaps idiosyncratic view. [↑](#footnote-ref-17)
18. Jonathan Evans, ‘In Two Minds: Dual-Process Accounts of Reasoning’, *Trends in Cognitive Sciences*, *7* (2003), 454-459; Keith Stanovich and Richard West, ‘Individual Differences in Reasoning: Implications for the Rationality Debate’, *Behavioral and Brain Sciences* 39 (2000), 645–726. [↑](#footnote-ref-18)
19. See Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux., 2011) for a broad overview. [↑](#footnote-ref-19)
20. Baruch Fischhoff, ‘Hindsight is Not Equal to Foresight: The Effect of Outcome Knowledge on Judgment Under Uncertainty’, *Journal of Experimental Psychology: Human Perception and Performance* 1.3 (1975), 288--299. [↑](#footnote-ref-20)
21. Some epistemologists reserve an evidential role for perceptual appearances/seemings while denying an evidential role for perceptual experiences (Tucker 2010, Brogaard 2013, Conee 2013). I don’t object to this, for the present purposes, anyway, since this would still put perceptual belief on the same evidential footing as *a priori* intuition, which is generally thought to involve intuitive seemings that are closely analogous to perceptual seemings. [↑](#footnote-ref-21)
22. See my *Perception and Basic Beliefs* for the externalist view, Elijah Chudnoff, *Intuition* (Oxford: Oxford University Press, 2013); Michael Huemer, *Skepticism and the Veil of Perception* (Lanham: Rowman & Littlefield 2001); Michael Huemer, ‘Compassionate Phenomenal Conservatism’, *Philosophy and Phenomenological Research* 74 (2007), 30–55; John L. Pollock, *Contemporary Theories of Knowledge* (Savage, MD: Rowman & Littlefield, 1986); James Pryor, ‘The Skeptic and the Dogmatist’, *Noûs* 34 (2000), 517–549; and Chris Tucker, ‘Why Open-Minded People Should Endorse Dogmatism’, *Philosophical Perspectives* 24 (2010), 529-545 for defenses of the internalist view. [↑](#footnote-ref-22)
23. I will use ‘seeming’ here the way this internalist view uses it, for a conscious mental state that has conceptual and propositional content and has assertoric force but that is nondoxastic. As such, it is intensionally and extensionally distinct from ‘intuition’, as I’ve been using it. In addition to the differences already mentioned, I would want to allow for the possibility of unconscious intuitions, while I doubt the internalist would think unconscious seemings were intelligible. I am sometimes (e.g., Jack Lyons, ‘Critical Notice: *Seemings and Justification*, ed., Chris Tucker’, *Analysis* 75 (2015), 153-164) inclined to think that externalists should instead co-opt the term ‘seeming’ for our own purposes, treating it as equivalent to ‘intuition’ and claiming that the internalists are simply wrong about the individuation criteria, but I won’t press that here. [↑](#footnote-ref-23)
24. E.g., Thomas Gilovich, Dale Griffin, and Daniel Kahneman, eds. *Heuristics and Biases: The Psychology of Intuitive Judgment* (Cambridge: Cambridge University Press, 2002); Amos Tversky and Daniel Kahneman. ‘Judgment under uncertainty: Heuristics and biases’, S*cience* 185 (1974), 1124-1131. [↑](#footnote-ref-24)
25. Jack Lyons, ‘The Epistemological Import of Morphological Content’, *Philosophical Studies* 169 (2014), 537-547. [↑](#footnote-ref-25)
26. David Hume, *Enquiries,* L. A. Selby-Bigge and P. H. Nidditch, ed. (Oxford: Clarendon Press, 1748/1975) 63. [↑](#footnote-ref-26)
27. David Hume, *A Treatise of Human Nature*, L. A. Selby-Bigge and P. H. Nidditch, ed. (Oxford: Oxford University Press, 1739/1978) 468-469. [↑](#footnote-ref-27)
28. Hume’s second quote here obviously isn’t concerned with *perception* of moral properties, but if it’s true that the only matter of fact related to vice that we can find *even in conception* is our own emotional reaction, then this is even more obviously true regarding perception. [↑](#footnote-ref-28)
29. *Modularity of Mind*. [↑](#footnote-ref-29)
30. E.g., William Chase and Herbert Simon, ‘Perception in Chess’, *Cognitive Psychology* 4 (1973), 55-81. [↑](#footnote-ref-30)
31. Although there has been a fair amount of recent discussion about the modularity of our mindreading capacities (e.g., Carruthers *Architecture*; Alan Leslie, ‘Developmental Parallels in Understanding Minds and Bodies’, *Trends in Cognitive Sciences* 9 (2005), 459–462; Jesse Prinz, ‘Is the Mind Really Modular?’, In Robert J. Stainton (ed.), *Contemporary Debates in Cognitive Science* (Malden, MA: Blackwell 2006). 22--36), there has been, to my knowledge, little discussion analogous to the high-levelism debate regarding the contents of perception. My claim about *cruelty* and the like expresses my hunch that high levelism about mindreading may well turn out to be correct. [↑](#footnote-ref-31)
32. Hersh Shefrin, ‘Behavioral Finance: Biases, Mean-Variance Returns, and Risk Premiums’, *CFA Institute Publications* (2007), 4–12; Jochen Reb, Gary Greguras, Shenghua Luan, & Michael A. Daniels, ‘Performance Appraisals as Heuristic Judgments under Uncertainty’, In S. Highhouse, R. S. Dalal, E. Salas, eds., *Judgment and Decision Making at Work* (New York: Routledge, 2013), 13—36; Wim De Neys, ‘Bias and Conflict: A Case for Logical Intuitions. *Perspectives on Psychological Science*, *7* (2012), 28-38; Oliver H. Turnbull, Cathryn E. Evans, Alys Bunce, Barbara Carzolio, & Jane O’Connor, ‘Emotion-based Learning and Central Executive Resources: An Investigation of Intuition and the Iowa Gambling Task’, *Brain and Cognition*, *57* (2005), 244-247; respectively. [↑](#footnote-ref-32)
33. Jack Lyons, ‘Circularity, Reliability, and the Cognitive Penetrability of Perception’, *Philosophical Issues* 21 (2011), 289-311. [↑](#footnote-ref-33)
34. [Lillian MacNell](http://link.springer.com/search?facet-author=%22Lillian+MacNell%22), [Adam Driscoll](http://link.springer.com/search?facet-author=%22Adam+Driscoll%22), [Andrea N. Hunt](http://link.springer.com/search?facet-author=%22Andrea+N.+Hunt%22), ‘What’s in a Name: Exposing Gender Bias in Student Ratings of Teaching’, *Innovative Higher Education* (forthcoming). [↑](#footnote-ref-34)
35. Simone Schnall, Jonathan Haidt, Gerald Clore, & Alexander Jordan, ‘Disgust as Embodied Moral Judgment’, *Personality & Social Psychology Bulletin*, *34* (2008), 1096–1109. [↑](#footnote-ref-35)
36. Earlier versions of this paper were presented at the ‘Evaluative Perception: Aesthetic, Ethical, and Normative’ conference in Glasgow and at the Southeastern Epistemology Conference in Athens, GA.

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