

Research Overview

When you want to learn about how your surroundings are, a great way to find out is to look---but how exactly do we learn from our visual experiences of the world? What do our experiences need to be like to provide us with good reasons for our beliefs? What assumptions---if any---must we make about our experiences to be rational in relying on them?

My research aims to answer such perennial questions in epistemology at a fine grain of detail, using today's resources from other areas of philosophy, as well as from outside philosophy altogether. To make progress in thinking about what our experiences must be like to provide reasons for our beliefs, I engage with contemporary philosophy of mind, as well as with current vision science. And to make progress in thinking about the degree of support our experiences provide for various beliefs, I draw on the theory of probability.

On the picture I defend, our conscious point of view on the world can give us reason to believe that the world is the way it seems, without our having to rely on assumptions about the reliability of our experiences or about their other features. I fill in the picture in much more detail below.

My future work will engage further with vision science to consider the effects of attention and our antecedent expectations on our own experiences. My future work will also draw on psychology to develop my existing research about our knowledge of our own minds.

Present Papers

My current papers focus on the following three questions:

- (1) *How* are we justified in forming beliefs on the basis of our visual experiences?
- (2) *When* are we justified in forming beliefs on the basis of our experiences?
- (3) *How* can we be justified in rejecting skeptical hypotheses about our visual experiences?

Question (1) concerns the kind of justification we get from our experiences. I address the question in "Basic Justification and the Moorean Response to the Skeptic" and "The Agony of Defeat?", where I defend the view that our experiences give us **basic** or non-inferential

justification. Consider how, when you are in sharp pain, it is reasonable for you to believe that you are in pain without your relying on any further beliefs---you can go straight from your pain to a justified belief you are in pain. Your pain thereby gives you basic justification to believe you are in pain. Contrast how, when you check your temperature with a thermometer, you must rely on your having reason to believe that the thermometer is reliable. Consulting the thermometer only gives you non-basic justification to believe that you have such and such a temperature. On the approach I take, when our visual experiences justify our beliefs about the external world, they can give us the kind of justification we get in the case of pain, without our relying on any beliefs about the reliability of your experiences or other matters. So some of our beliefs about the external world can legitimately be taken as starting points for further enquiry, without depending on any further beliefs themselves. This position contrasts sharply with that of traditional foundationalists such as A.J. Ayer and arguably Descartes, who demand that we build up to beliefs about the world from beliefs about our own states of mind.

My “Basic Justification” paper clarifies and defends the position that we can have basic justification for perceptual beliefs about the external world. Crucially, the view concerns what *constitutes* support for our perceptual beliefs, rather than merely what is in place when our experiences justify beliefs. The view is thus compatible with the claim that background assumptions are in place whenever our experiences justify our beliefs (a similar distinction is stressed in the ethics literature by Jonathan Dancy in *Ethics Without Principles*). And the view does not propose any sufficient condition for experiences to justify beliefs---one can deny that background assumptions always play a constitutive role when experiences justify beliefs, and still leave open what further facts must be in place when experiences justify beliefs, such as their being reliable. These two distinctions defuse many objections against the view, while retaining its ability to underwrite foundationalism. In favour of the view, it fits best with the claim that children and unreflective adults can form justified beliefs simply by taking their experiences at face value, rather than by responding to the combination of their experiences and further assumptions about them.

In “The Agony of Defeat?”, I respond to what I take to be the best argument against my view. Notice that our perceptual beliefs are sometimes undermined by evidence that our experiences are misleading, as when you are told that the apparent water in the distance is only a mirage. The argument against my view demands an *explanation* of how our perceptual beliefs can be undermined by further evidence that things may not be as they appear---I reply by providing just

that. Our experiences provide only as much basic support for our beliefs about the external world as they do for us to believe we are seeing the external world as it is. New evidence undermines our basic perceptual beliefs about the external world by undermining our support for the belief that we are seeing the external world as it is.

“Seeing Through the ‘Veil of Perception’” addresses a further classic thought about basic justification---tracing back at least as far as George Berkeley---which links the epistemology of perception with the metaphysics of perception. As Bertrand Russell puts the idea:

. . . the real table, if there is one, is not the same as what we immediately experience by sight or touch or hearing. The real table, if there is one, is not *immediately* known to us at all, but must be an inference from what is immediately known (1912: 11).

Notice Russell’s use of “must”. He assumes that, since our visual experiences do not put us in direct contact with external reality (but instead only with “images” or “sense-data”), our experiences cannot give us basic justification for beliefs about the external world. In my paper I argue that Russell’s assumption is wrong---there is room for us to have basic justification for beliefs about the external world whether or not our experiences put us in direct contact with the world. To see that Russell’s assumption can be coherently denied, consider the view that a reliable connection between our experiences and the world could suffice for our experiences to give us basic justification, even if that reliable connection involves no direct contact with the world.

Assuming our experiences do give us basic justification for some beliefs about the world, which beliefs do they so justify? The “Veil” paper solves a problem about whether our experiences can even give us basic justification for beliefs about what colors things have. The problem is generated by the possibility that the way I experience redness is the same as the way you experience greenness (and vice versa). In such an “inverted spectrum” scenario, when we look at a ripe tomato, the way my experience represents redness is the same as the way your experience of an unripe tomato represents greenness (and vice versa). Such a possibility is admitted by many philosophers of perception (not to mention philosophically-minded children!), but does it allow for us to have basic justification from experience to believe that the ripe tomato is red? The traditional Berkeley/Russell answer, endorsed by current philosophers such as Michael Tye, is “no”. I argue against the traditional answer, and develop an epistemology of the inverted spectrum on behalf of philosophers of perception such as Ned Block, David Chalmers, and

Sydney Shoemaker. The key thought is that even in a case of an inverted spectrum, one can form justified beliefs about what colors things have simply by taking one's experiences at face value.

Assuming our experiences give us basic justification for beliefs about the colors of things, can they do more? The issue here concerns where exactly we may legitimately start from in our enquiry about the world---only from "low-level" beliefs about colors and say shapes? Or perhaps also from "high-level" beliefs about the mental states of others, about the moral status of their actions, or about causal relations between events? Which beliefs are good candidates to be foundational beliefs? I make progress with this classic question in the "Veil" paper and in the "Significance of High-Level Content", where I put epistemology in further dialogue with the philosophy of mind. These papers look closely at potential connections between how our experiences represent the world and which beliefs they justify. I start by investigating the possibility that, even if our experiences represent (for example) the mental states of others, they could still fail to give us basic justification for beliefs about the mental states of others. One might hold that high-level beliefs are too dissociated from consciousness to enjoy basic justification from experience, or too tightly related to one's antecedent beliefs and expectations to enjoy basic justification from experience, but I argue that neither line of thought can be developed in a successful way. I also argue that the beliefs basically justified by experiences can go well beyond what our experiences represent, for instance in the case of beliefs about similarity relations between colors. To reach the striking conclusion that we can have basic high-level beliefs, one actually need not hold that our experiences represent corresponding high-level contents.

According to the picture I have developed so far, our experiences can give us justification for beliefs without our relying on assumptions say about their reliability. But what further facts need to be in place for experiences to justify beliefs? This is the focus of question (2), about when experiences justify belief. In "Deception and Evidence", I argue for the **internalist** view that an experience can be a source of justification even if it is a case of illusion or is otherwise misleading. On the internalist view, you can be equally justified in believing that something yellow is present both when you are really seeing something yellow in good viewing conditions, and when you are merely having a realistic hallucination that something is yellow. I defend the view by using probabilistic considerations about how we should proportion our confidence to our evidence. Non-internalist views bizarrely imply that our beliefs could be *more* justified if we

were hallucinating or otherwise deceived, where proponents of those views have wanted to say that we are less justified in such cases.

On my approach, even if you were in the Matrix or a victim of Descartes's evil demon, so that your experiences were systematically misleading, you would still be rational in taking your experiences at face value. More generally, I reject **reliabilist** approaches which explain the ability of experiences to justify beliefs in terms of the accuracy of experiences. In "Does Perception Justify Belief?", I show that if simple reliabilist positions were true, a victim of Descartes's demon could actually have justification to believe her experiences are misleading, a claim which no one accepts. In "Explaining Perceptual Entitlement", I evaluate a much more sophisticated approach defended by Tyler Burge and Christopher Peacocke. By focusing on what makes it the case that perceptual states represent what they do, the approach is more promising than simple reliabilist positions. I give the approach critical attention it has so far lacked. Burge's view is designed to allow that a person's experience can justify a belief even if the person's experience is misleading, so long as the experience is of a type that is suitably reliable. However, his argument for the view actually leaves open the possibility that an experience justifies a belief only if the experience is not misleading. Also, by focusing on how the contents of experiences are determined, the approach fails to explain what is special about the role of experiences in epistemology---states of visual imagination and visual belief acquire their content in very similar ways to experience, while still playing very different roles in justifying further beliefs.

Philosophers such as Descartes have long worried about question (3), about how they could be in a position to reject skeptical hypotheses about their experiences. Suppose you ask yourself whether you are a brain in a vat, being manipulated to have experiences which seem to be normal but which are in fact radically misleading. According to **Moorean** answers to (3), you can legitimately answer the question by looking at your hands, reaffirming your belief that you have hands, and simply inferring that you're not a handless brain in a vat. In my early paper "Transmission Failure Failure", I responded on behalf of the Moorean to the standard objections to the view. However, I now reject the Moorean position on the basis of considerations about probability rehearsed in "Basic Justification and the Moorean Response to the Skeptic". Since our experiences are predicted by skeptical hypotheses, our experiences are in no position to count against skeptical hypotheses. To put the point roughly using a toy example, the Moorean is much like a scientist who considers a hypothesis ($F=ma$), makes an observation which is predicted by

the hypothesis (the F of this body = the m of this body times the a of this body), and then, in response to the observation, concludes $F \neq ma!$

In the “Basic Justification” paper, I also explain why a non-Moorean view coheres with the view that our experiences give us basic justification, contrary to what many other philosophers have thought. Here I cash in the distinction mentioned earlier between what constitutes one’s justification for a belief, and what is in place when one has a given justification for a belief. Considerations about probability plausibly show that, if you have justification from an experience E for an external world belief, then you must have justification not from E to reject skeptical hypotheses about the experience. Be that as it may, we plausibly still enjoy basic justification from our experiences. Indeed, our having justification not from E to reject skeptical hypotheses could itself be explained by the ability of our experiences to provide basic justification, as Cohen (2010) and Wedgwood (forthcoming) have in effect subsequently argued.

Work in Progress and Future Research

My most recent work focuses on the role of visual **consciousness** in justifying our beliefs, with consideration of relevant research in the science of vision. Compare an ordinary subject who sees an X , for whom there is something it’s like to see the X , and a **blind-sighted** subject who only has unconscious perceptual processing of the X , for whom “the lights are off”, but who will say that an X is there if forced to guess. On the approach I take, the subject with visual consciousness has more reason to believe that an X is present, thanks to the fact that she has visual consciousness. (I lay groundwork for this approach in my “Explaining Perceptual Entitlement” critique of Burge, who assigns no role to consciousness in his epistemology of perception).

The subject’s conscious point of view is no simple thing however---a question remains open about how much one’s conscious point of view encompasses. On an influential interpretation of experimental work by Daniel Simons and Christopher Chabris, as well as Brian Scholl and collaborators, we are conscious only of that to which we attend. In “Consciousness and Distraction”, I defend the contrary view that we are conscious of more than that to which we attend (experimental work by Christof Koch and Victor Lamme is also on my side). The question then arises in epistemology of whether only consciousness inside attention plays a role in giving us justification for beliefs. In “Consciousness, Attention, and Justification”, and “TMI: the Epistemology of Phenomenal Overflow”, I argue with my co-author Susanna Siegel that attention

is not needed for consciousness to justify beliefs, and that even consciousness which is *inaccessible* to attention can still play an epistemic role.

In future work I plan to deepen my engagement with the science of vision, and to explore implications for epistemology in several related areas. One aim is to extend my work on consciousness and attention in that light. Some think of attention as “the index finger of the mind”, simply pointing at what we experience, but research by Marisa Carrasco suggests that attending to something does not leave our experience untouched. Some effects of attention here may be beneficial, by bringing things into focus and increasing the amount of detail our experiences give us about the world. Some effects though may be detrimental, by making it harder for us to know what our pre-attentive experiences were like, or by making our experiences more detailed although actually less accurate about the world.

My future research will also look more generally at how much detail our conscious experiences encompass. Consider the example of the “speckled hen” introduced by Ryle and Chisholm---if you see a speckled hen in good viewing conditions, and the side facing you has say 39 speckles, does your experience both represent that there are 39 speckles there and give you reason to believe that there are 39 speckles there? The question about the level of detail represented by our experiences should be answered with an eye on experimental work. And if our experiences do represent an extremely high level of detail, challenges arise about our ability to properly take up that level of detail in non-inferential perceptual judgment, without simply guessing.

If our experiences do have highly detailed content, but do not give us justification to believe highly detailed propositions, the view that experiences give us basic justification is not yet threatened---as I emphasized above, the view is not committed to any sufficient condition for an experience to justify a belief. Still, the example does press the question of which beliefs might enjoy basic justification. Here I’m especially interested in whether “ought” implies “can” with respect to what perceptual beliefs we ought to have, and in the possibility that we routinely have perceptual evidence we are unable to properly take advantage of (I explore similar issues in the case of consciousness beyond attention).

Self-Knowledge

A strand of my research I have not yet discussed is about our access to our own minds---the internal world rather than the external world. In “Judgment as a Guide to Belief”, I focus on the connection between conscious judgment and belief (you paradigmatically judge that it is 2011 when you sincerely assert it is 2011, but you believe it is 2011 whether or not that thought is crossing your mind). On my view, judgment is a basic yet fallible guide to belief. In particular, your consciously judging that *p* can give you basic justification to believe you believe that *p*, even though it is possible for you to judge that *p* when you don’t believe that *p*. I argue for the view largely by reflecting on remarks by Gareth Evans about the “transparency of belief”, and by explaining what is wrong with “Moore-paradoxical” judgments of the form “*p* and I don’t believe that *p*”---judging the first conjunct supplies evidence that assertion of the second conjunct flouts. I also defend my view from rival views on which only a belief that *p* itself can justify you in believing you have a belief that *p*, and from challenges which parallel objections to the view that experiences can provide basic justification for beliefs about the external world. Philosophers today usually insist there is no good sense in which we “see” our own mental states---we sometimes experience pain, but we never have a separate experience *of* our experience of pain. Be that as it may, there is much to be learned by thinking about self-knowledge in terms of parallels with the epistemology of perception. In “Introspection and Inference”, I identify and remove the challenges for basic access to our own minds, tying together my work on the epistemology of perception with my work on self-knowledge.

Going forward, I plan to do more research about the extent of our access to our own minds, but with more input from psychology than I have used so far. I also plan to evaluate experimental input into the debate about how to explain what access to our own minds we do have. There needs to be more dialogue between the empirically informed literature by figures such as Goldman or Nichols and Stich, and the more traditional literature by figures such as Shoemaker or Moran.