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The epistemic significance of experience

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Abstract According to orthodoxy, perceptual beliefs are caused by perceptual experiences. The paper argues that this view makes it impossible to explain how experiences can be epistemically significant. A rival account, on which experiences in the "good case" are ways of knowing, is set out and defended.

Keywords Perception · Knowledge · Experience · Belief · Davidson

I don't merely have the visual impression of a tree: I know *that it is a tree.*
Wittgenstein, *On Certainty*, §267

Consider an ordinary situation in which J.L., someone with normal vision, looks over a fence and sees a pink pig, in full view and bathed in spring sunshine. Because he sees the pink pig, J.L. acquires some knowledge about the animal: that it is pink, a pig, snuffling, before him, and so forth. According to a very familiar and widely endorsed philosophical picture, this situation involves a certain kind of causal transaction between the pig and J.L., involving two important stages. At the first stage, light bouncing off the pig and its surroundings causes J.L. to have, via the operation of his eyes and visual system, a certain "visual experience". At the second stage, the visual experience causes J.L. to acquire certain beliefs about the pig which, all else equal, will amount to knowledge. It is here, at the *experience-belief synapse*, that the non-conceptual becomes conceptualized, or that the Given becomes the Taken.

For simplicity, focus on J.L.'s belief that the animal is pink. Then the relevant visual experience may be characterized, using a locution common in the literature, as "an experience as if that (the pig) is pink"; schematically, "an experience as if

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p".[1] The pig (more specifically, the pig's being pink) causes the experience, which in turn causes the belief. The first stage is pretty much inevitable, given that the person is looking at the pig. But the second stage is not supposed to be: if J.L. suspects that a red light is shining on the pig, or believes that his hip flask has been spiked with porcine-hallucinogen, then he will be able to inhibit the transition from experience to belief. Indeed, the apparent possibility of keeping the first stage while blocking the second is the chief argument for distinguishing the two.[2]

Once this picture is in place, a natural question arises: what work is the experience doing? Presumably its presence must at least grease some epistemic wheels: without it, there would be no perceptual knowledge, or perceptual knowledge would be harder to attain, or at least harder to use in the service of reasoning and action. Donald Davidson famously raised this question. This paper argues that given the presupposition of the standard picture, it has no satisfactory answer. The solution is to reject the presupposition, in particular to reject the second stage—the experience-belief synapse is a myth.

1 Davidson's Challenge

In "A coherence theory of truth and knowledge", Davidson canvasses some "attempt[s] to ground belief in one way or another on the testimony of the senses: sensation, perception, the given, experience, sense data, the passing show" (1986: 310). He first considers the idea that "sensations" ground or justify "the belief in those sensations", such beliefs forming the foundation on which all other beliefs are built. One worry Davidson has is familiar and compelling, namely that such beliefs "cannot support any inference to an objective world" (310). He then tries "a bolder tack":

> Suppose we say that sensations themselves, verbalized or not, justify certain beliefs that go beyond what is given in sensation. So, under certain conditions, having the sensation of seeing a green light flashing may justify the belief that a green light is flashing. The problem is to see how the sensation justifies the belief. Of course if someone has the sensation of seeing a green light flashing, it is likely, under certain circumstances, that a green light is flashing. *We* can say this, since we know of his sensation, but *he* can't say it, since we are supposing he is justified without having to depend on believing he has the sensation. Would the sensation still justify him in the belief in an objective flashing green light? (311)

[1] The introduction of this jargon is far from innocuous, but at least there are clear cases where it is supposed to apply, and one is J.L.'s. That will do to get the problem of this paper going. Talk of experiences "as if p" naturally goes along with the popular view that perception has representational (or propositional) content, which (partly to simplify the dialectic) will be assumed throughout: accordingly, experiencing as if p does not entail that p. [For a selection of different defenses and interpretations of this idea see Byrne (2009), Pautz (2010), Siegel (2010), Schellenberg (2011); examples of dissent include Campbell (2002), Johnston (2006, 2014), Travis (2013), Genone (2014).] Granted that "experience as if p" has been legitimized, the issue of the admissible fillings for "p" arises. Everyone agrees that the contents of (visual) perception at least concern features detected by early vision (shape, shading, texture, motion, color, illumination,…); it is controversial whether (e.g.) *being a pig* can figure in perceptual content. [For an argument that it can, see Siegel (2006); for a reply see Byrne (2009: 449–50)].

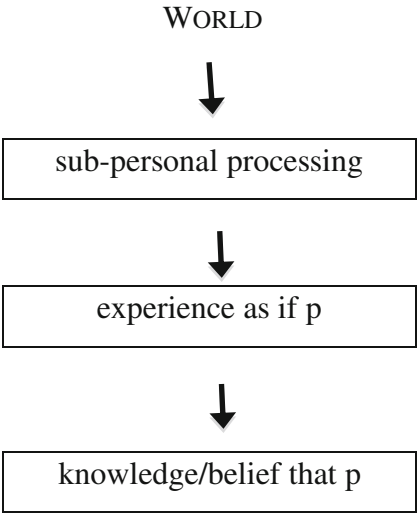
[2] See, in particular, Evans (1982: 123), Peacocke (1983: 5–6).

The proposal on the table, then, is that an experience "as if a green light is flashing" (in Davidson's idiosyncratic terminology, a "sensation of seeing a green light flashing"[3]) "justifies" the belief that a green light is flashing. In general, an experience as if p justifies the belief that p. (The first idea, that beliefs about experiences are the foundation of all other beliefs, is not very popular; but this second one enjoys wide support.) Davidson's complaint is this:

> The relation between a sensation and a belief cannot be logical, since sensations are not beliefs or other propositional attitudes. What then is the relation? The answer is, I think, obvious: the relation is causal. Sensations cause some beliefs and in *this* sense are the basis or ground of those beliefs. But a causal explanation of a belief does not show how or why the belief is justified. (311)

Now this objection may seem entirely without merit. First, as the jargon of "experiencing as if p" suggests, a view currently in vogue is that sensations (experiences) *are* propositional attitudes. Davidson's claim that the relation cannot be "logical" is accordingly quite controversial. (Admittedly, it is unclear why a logical relation is supposed to help, but set that aside.) Second, at least part of the reason why we have perceptual knowledge is that our perceptual systems are appropriately receptive to environmental goings-on. Someone knows that there is a green light flashing in part because a suitable causal connection holds between the light and her visual system. But since the "sensation of seeing a green light flashing" is part of that causal chain, how can it be—as Davidson thinks—epistemologically irrelevant?

Still, a genuine worry about sensations being "mere causes" is close by—if not exactly the one Davidson has in mind. Here a literal picture of the orthodox picture will help:



[3] Although one cannot see a green light flashing without a green light flashing, having a "sensation of a seeing a green light flashing" is clearly supposed not to entail anything about green lights.

A green light flashes, which affects light transducers in the eye, leading to subpersonal processing in the brain. The information that a green light is flashing is extracted, and the subject has an experience as if a green light is flashing. Then, assuming the perceiver trusts the testimony of her senses or—in Peacocke's evocative phrase—"takes her experience at face value"[4], she comes to believe and know that a green light is flashing.

Given some elementary empirical facts, the first parts of this causal chain are clearly essential. Light can only affect the nervous system via sensory transducers. Complex computations over inner representations are also required—if only for simplicity's sake, we may assume that Gibsonian alternatives are not workable. That gives us the information that there is a green light flashing. But why parcel that up into a "sensation of seeing a green light flashing"? Why not pass the information straight on to belief? What would be lost, epistemically, if the sensation or "intermediary" (as Davidson calls it) were cut out?

Here is an analogy. Suppose you want to get a message to Bertie. You can tell him yourself, or you can tell Alys instead, and she will pass the message on. Assuming that telling Bertie yourself doesn't involve a long trip or other disadvantages, why bother with the messenger? In fact, telling Alys gratuitously *adds* possibilities of error—she might garble the message or fail to tell Bertie.

Block's well-known (hypothetical) example of a "superblindsighter" provides a vivid way of raising the issue:

> Visual information from his blind field simply pops into his thoughts in the way that solutions to problems we've been worrying about pop into our thoughts, or in the way some people just know the time or which way is North without having any perceptual experience of it. The superblindsighter himself contrasts what it is like to know visually about an X in his blind field and an X in his sighted field. There is something it is like to experience the latter, but not the former, he says. It is the difference between *just knowing* and knowing via a visual experience. (Block 1995: 233)

Superblindsight is (or so we shall stipulate) a condition in which subpersonal perceptual processing is connected directly to cognition, resulting in the absence of perceptual experience. The superblindsighter's "perceptual" beliefs, we may further stipulate, are at least as reliable as ours. On the assumption of the orthodox picture, the possibility of superblindsight is hard to deny: the condition can presumably be induced by snipping out the "experience as if p", and reconnecting the front and back ends of the perceptual process.

Block, not unreasonably, supposes that the superblindsighter has genuine *knowledge* of his environment—it is knowledge received directly from his visual system, not "via a visual experience". If that is right (and reinforcement will be supplied later, in Sect. 3.2), then despite lacking the synapse the superblindsighter is epistemically none the worse. The sensation or experience thus appears to be a

[4] Peacocke (1983: 39). Although supposedly "taking one's experience at face value" need *not* require awareness of one's experience, the phrase somewhat tellingly suggests the opposite (see the discussion of Modernism and Traditionalism in Sect. 3).

superfluous middleman, not adding any value to the end product, knowledge of one's environment. Surely experience is more epistemically significant than this! *Davidson's Challenge*, as we can call it, is to explain how that can be.

2 The Challenge clarified

First, the Challenge isn't a *skeptical* Challenge. It is not disputed that we have copious amounts of perceptual knowledge and, in particular, that J.L. knows that the pig is pink. Neither is it disputed that experience plays a role in explaining why J.L. knows that the pig is pink. For one thing, given the orthodox picture, the experience is a component in the causal chain linking the color of the pig and J.L.'s belief that it is pink, and so it must figure in any complete causal explanation of J.L.'s knowledge. But the experience's acknowledged role in J.L.'s knowledge does not show that it *helps*—it might even hinder, like Alys's testimony to Bertie.

Second, to meet the Challenge it is not required to show that experience is *necessary* for perceptual knowledge. That is to set the bar too high. Tweak the analogy of the previous section and suppose that Alys's testimony *does* help: Bertie is too far away for you to talk to him yourself, and telling Alys nicely solves that problem. If experience is analogous to Alys's testimony in this case, then Davidson's Challenge has a perfectly satisfactory answer. But of course there may be other more-or-less equally effective ways of solving the problem: tell Dora, send Bertie a telegram, and so on. So to address Davidson's Challenge it is enough to show that experience is *an* effective solution to the problem of equipping the organism with perceptual knowledge. More specifically, it needs to be shown that experience—contrary to what the superblindsight example suggests—is more than a pointless intermediary.

Third, the possibility that the Challenge is unanswerable should not be dismissed outright. (Davidson himself thought it was unanswerable.[5]) Because evolution works by gradual modification, sometimes adaptive structures will have features that a good design from scratch would not have included. The vertebrate retina, for instance, is oriented the "wrong way", with the neural wiring and blood supply between the photoreceptors and the light source. (The standard explanation is that this is a side effect of the way the retina evolved from brain cells.) Perhaps the belief-experience synapse is also a bug, another illustration of how evolution can produce a suboptimal solution. Still, it is quite obscure how such a solution could have arisen, and this paper will proceed on the assumption that the Challenge has an answer.[6]

Finally, the superblindsight example from Block might suggest that Davidson's Challenge is the demand to explain the epistemic disadvantages of being a "zombie". On any of the usual characterizations of zombies, this is incorrect. Take Block's characterization, for instance, on which zombies are "creatures that have

[5] As does Lyons (2009).

[6] Thus agreeing, in effect, with the opening pages of Johnston (2006).

information processing that is the same as ours but no phenomenal consciousness" (1995: 229). A true zombie in this sense retains the experience-belief synapse, since that is an information-processing step, although there is "nothing it is like" for the zombie to enjoy an experience as if p. (Or, if ~~absence of~~ phenomenal consciousness is supposed to be essential to experiences, the zombie will have a *quasi*-experience as if p.)

If zombies in this standard sense are possible, then there is an obvious worry about the epistemic relevance of phenomenal consciousness. But it is not *our* problem—Davidson's Challenge is quite different. Zombies have experiences (at least, quasi-experiences). The (quasi-) experience-belief synapse occurs in zombies, and the literal picture of orthodoxy, above, applies to them too. If zombies have perceptual knowledge, Davidson's Challenge arises for them just as much as it does for us.[7]

In contrast, superblindsighters make the Challenge vivid precisely because they *lack* the synapse. A superblindsighter is only "a very limited partial [visual] zombie" (233): his visual information processing is similar to ours, but different in a crucial respect.

3 Replies to the Challenge

For present purposes, views of the epistemic significance of experience can be divided into three—Traditional, Modern, and Postmodern—with correspondingly different replies to Davidson's Challenge.

3.1 The Traditional View

Suppose DCI Tennison knows that the suspect committed the murder. The suspect's fingerprints on the knife are "epistemically significant"—they play a crucial role in explaining the detective's knowledge. How, exactly? The obvious answer is that facts about the fingerprints are (part of) the detective's *evidence*. Tennison knows that the suspect's fingerprints are on the knife, and without that piece of evidence she wouldn't know that the suspect committed the murder. On the Traditional View, the epistemic significance of experience is exactly parallel to the epistemic significance of the fingerprints. When J.L. sees the pig, he knows that he is having an experience as if that (the pig) is pink, and this is an essential piece of his evidence—without it, he wouldn't know that the pig is pink. Block's superblindsighter is in Tennison's position with her knowledge of the fingerprints subtracted.[8]

[7] Similar remarks go for zombies in an even more standard sense (e.g. Chalmers 1996: 94), creatures who are physically the same as us but who lack phenomenal consciousness.

[8] One could imagine a different kind of superblindsighter, for whom facts about "intellectual seemings" serve as evidence, and who is accordingly epistemically as well off as someone with experiential evidence. (Analogy: a detective who knows that the suspect committed the murder on the basis of equally good but *different* evidence from Tennison's.) This kind of superblindsighter is no threat to the Traditional View's account of the epistemic significance of experience—see the second point in Sect. 2.

The Traditional View is not just hospitable to an experience-belief synapse, it positively requires one. To see this, note that Tennison's evidence—the fact that the suspect's fingerprints are on the knife—causally explains why she believes that the suspect is the murderer. And since the perceptual case is supposed to be parallel, J.L.'s experiential evidence—the fact that he is having an experience as if the pig is pink—causally explains why he believes that it is pink. That is, the experience causes the belief, and hence there is an experience-belief synapse.

So far, so good. But there are two main objections to the Traditional View, one straightforward, and one which is a little more subtle. The straightforward objection is simply that children and non-human animals have plenty of perceptual knowledge, but (at least in many such cases) have no knowledge of their perceptual experiences. And if these creatures have perceptual knowledge that is not based on experiential evidence, presumably our perceptual knowledge isn't (or isn't typically) based on experiential evidence either. Thus the Traditional View immediately runs aground on some elementary empirical facts.

The more subtle objection can be seen if we return to DCI Tennison. Why does she need to know anything about the fingerprints? Why can't she simply know that the suspect committed the murder without bothering with fingerprints or other pieces of forensic evidence? There is no mystery, because Tennison wasn't there. No need for fingerprints if the detective had witnessed the crime, but she didn't.

Well, what about the pig? Why does J.L. need to know that he is enjoying an experience as if the pig is pink? Why can't he simply know that the pig is pink without bothering with experiences or other pieces of mental evidence? And here there is a mystery, because J.L. *is* there. The pig is right under his nose. Why can't he know that it's pink simply by seeing the scene before his eyes?

The answer, on behalf of the Traditionalist, is that J.L. *isn't* there, in the relevant sense. Rather, he's trapped inside his own mind, receiving signals ("sensations") from without, from which he has to divine the presence of the pig. So unless J.L. has knowledge of his sensations, knowledge of the pig will be impossible.

Davidson, incidentally, doesn't entirely reject the Traditional View. He agrees—quite remarkably—that "of course we can't get outside our skins to find out what is causing the internal happenings of which we are aware" (1986: 312). However, he disagrees that the only way out is to reason from the "internal happenings" to their external causes; instead, Davidson argues, the key to the solution is that "most of a person's beliefs must be true, and so there is a legitimate presumption that any one of them, if it coheres with most of the rest, is true" (314).[9]

There is a grain of truth in the Traditional View, namely that perceptual knowledge requires some mechanism for extracting information about one's environment from "internal happenings" caused by those objects. But these internal

[9] The idea that we are only ("directly") aware of our "sensations" is not just an occupational hazard of philosophers. For example, the physicists Sokal and Bricmont, in the course of a hard-nosed attack on the excesses of certain French Postmodernists (not in the sense of this paper!), write (as if it were completely obvious): "we have direct access only to our sensations. How do we know that there even *exists* anything outside those sensations? The answer, of course, is that we have no *proof*; it is simply a perfectly reasonable hypothesis" (1999: 53). Their respect for science appears to have deserted them at this point.

happenings are themselves invisible to their hosts—an ordinary perceiver has no knowledge of the "irritations of her sensory surfaces", in Quine's phrase (2008: 45). Indeed, such happenings are no easier to find out about than the external happenings that cause them, and that is why perceptual theories in cognitive science do not assume that they are known. The Traditional View finesses this problem by conceiving of the relevant internal happenings as impossible to miss—in Ryle's simile, they are "phosphorescent, like tropical sea-water, which makes itself visible by the light which it itself emits" (Ryle 1949: 158–9). Since it is hard to see how anything physical, like the irritation of a sensory surface, could have that special epistemic glow, the Traditionalist is naturally led to dualism.

The Traditional View squarely faces Davidson's Challenge, and gives what would be an entirely pleasing answer, were it true. Unfortunately, it is not true.[10]

3.2 The Modern View

In the "good case", J.L. is confronted with a pink pig; in the "bad case" the pig merely appears pink (it is, say, a white pig craftily illuminated by red light). In the good case, J.L. knows that the pig is pink, but not in the bad case, for the pig is not pink in the bad case. Does J.L. nonetheless have some justification to believe that the pig is pink in the bad case? Many philosophers have thought so. The Traditional View is nicely tailored to accommodate this: in the bad case, just as in the good case, J.L. knows that he is having certain experiences, evidence that, according to the Traditionalist, supports his belief that the pig is pink.[11]

One can think of Modernism as motivated by the need to preserve this feature of the Traditional View, while rejecting its commitment to *introspection* as a condition on knowledge of one's environment. The Modernist's master stroke is simply to excise this commitment, leaving everything else intact. According to the Modernist, in order for J.L. to know that the pig is pink he merely needs to *have* an experience as if it is pink—he doesn't need to know that he does. So J.L. could be another pig himself: provided the experience-belief synapse is functioning properly, and the

[10] Admittedly, the Traditional View does have its contemporary defenders, notably White (2014), Vogel (2015). Although Vogel does not attack rival positions, White argues for Traditionalism partly by arguing against Postmodernism (explained in Sect. 3.3 below); if his arguments work, then they also show that the position defended here is incorrect. A response to White's arguments deserves a paper of its own, however.

[11] The Traditionalist will typically go further, in two respects. First, she will insist that in the (illusory) bad case J.L. is *fully justified* in believing that the pig is pink, just as he is in the good case, when he knows that the pig is pink. Second, she will want to treat the *hallucinatory* bad case just like the good case and the (illusory) bad case, which raises an obvious problem about *what*, exactly, J.L. is justified in believing when he hallucinates a pink pig. Similar remarks also go for Modernism. But for the purposes of this paper there is no need to saddle either the Traditionalist or the Modernist with these extra commitments. [Smithies is a Modernist who has defended the second commitment (2014) only to subsequently reject it (forthcoming)].

world cooperates, J.L. will know that the pig is pink. Thus the first objection to the Traditional View has no force at all against the Modern one.[12]

The second objection remains, though. Granted, J.L. can know that the pig is pink without knowing that he's having experiences, but why does he even need to *have* experiences, conceived as the proximal cause of perceptual beliefs? Why aren't they pointless insertions in the causal chain that terminates with J.L. knowing about the pig and its color?

The Traditionalist's answer to this question—to put it more bluntly than Traditionalists tend to—is that J.L. needs experiences to serve as signs or clues that a pig is present, because *he doesn't see the pig*. (Put more cautiously but less clearly, J.L. doesn't "directly" see the pig.) The Modernist, however, cannot give this reply. It is of the essence of the Modern View that J.L. is *not* aware (or, at any rate, need not be aware) of his experiences; they are not in any troubling sense "between" him and the pig. What he *is* aware of—"directly", if you like—is the pig itself.

However, if the orthodox picture needs to be correct in order for J.L. to be aware of—specifically, to see—the pig, then the Modernist does have a reply to the second objection. Seeing the pig is surely *an* effective means to knowledge of the beast. If J.L. sees the pig, and viewing conditions are good, then information about the pig is flowing through his visual system. Seeing the pig enables J.L. to attend to the pig and its features, thereby gaining even more information. And if an experience-belief synapse is necessary for seeing things, then the synapse has all the epistemic significance one might reasonably hope for.

The trouble is that the synapse does not appear necessary for seeing things. Block's superblindsighter is able to single out X's and other objects in his blind field, or so we may suppose. He can point to them, attend to them and their features, and so on. Despite the superblindsighter's insistence that there is "nothing it's like" for him to look at an X, this appears to be a (bizarre) case of "unconscious" seeing. (And even if scare quotes are insisted upon, synapseless "seeing" seems to have all the epistemic advantages of seeing, which is really all that is needed.) So, unlike Traditionalism, there is nothing in Modernism that obviously prevents superblindsighters from doing at least as well as the sighted. Is there something that unobviously prevents it?

Siegel and Silins review the current options in their useful survey article on perceptual epistemology (2015). Their starting point is congenial to both the Traditionalist and Modernist:

> [W]e begin from the assumption that experiences (such as the one you have when you see [a jar of mustard in the fridge]) can justify external world beliefs about the things you see, such as [the belief] that the mustard jar is in the fridge. (781)

[12] In addition to Smithies (see above note), the numerous Modernists include Pollock (1974), Pryor (2000), Huemer (2001), Alston (2002), Audi 2011. Pollock was a principal originator of the movement and his motivations are critically discussed in Byrne (2014a).

The Traditional View, though, is not in contention, because Siegel and Silins are plainly assuming that one need not be aware of one's experiences in order for them to "justify external world beliefs".

They explain what "experiences" are as follows:

> In our usage, an experience is a phenomenal state, individuated by what it is like to be in that state (or equivalently, by its phenomenal character). (783)

In the bad case, J.L. in the same phenomenal state as he is in the good case, and so (on Siegel and Silins' conception) he has the same experience. This conception of experiences fits nicely with the characteristic Modernist (and Traditionalist) claim that perceptual beliefs are justified in the bad case.

Siegel and Silins then canvass the main answers to the following question:

> Which features of the experience [as if p] make it the case that it can provide rational support for [believing that p]? (784)[13]

To answer this question is not quite to address Davidson's Challenge, since the relevant features of the experience might also be present to a more significant degree, or in a more significant way, in the case of superblindsight. Features that conduce towards the reliability of the belief that p are a case in point, since the belief-experience synapse would appear to *detract* from reliability, if anything. (All else equal, telling Alice to tell Bertie is a less reliable method than simply telling Bertie yourself.) Rather, to come to grips with the Challenge it also needs to be argued that experience makes some proprietary epistemic contribution, thus evading the "superfluous middleman" charge.

So we should look for features that *only* experiences have, and Siegel and Silins examine two candidates that hold out some initial promise: an experience's "phenomenal character" and its "phenomenal force".

Accounts of phenomenal character divide on a fault line between *presentationalists* and *sensationalists*. Presentationalists think that phenomenal character is solely a matter of the subject's *awareness* (or better, *ostensible* awareness) of his environment. For instance, J.L., in seeing the pig, is aware of—in alternative terminology, is *presented* or *confronted* with—a segment of visible porcine reality, distinctively shaped, textured, shadowed, colored, and so on. According to presentationalists, that presented segment of reality fixes the phenomenal character of his experience. (In the bad case, it is the merely ostensibly presented segment of reality that fixes phenomenal character.[14]) Characteristic presentationalist pronouncements include:

> to know what one's experience is like is to know what properties, aspects or features are presented to one in having the experience. (Martin 1998: 174)

And:

[13] As Siegel and Silins note, a prior question is "Given an experience, which propositions, if any, does this experience provide rational support for believing?" (784).

[14] Only presentationalists who think that perception is representational will accept this claim about the bad case: neither Martin nor Campbell (quoted immediately below) accept it. See also note 1.

> the features that define what it is like to have an experience are properties the objects we experience (not our experience of them) have. (Dretske 2003: 67)

And:

> [T]he phenomenal character of your experience, as you look around the room, is constituted by the actual layout of the room itself: which particular objects are there, their intrinsic properties, such as color and shape, and how they are arranged in relation to one another and to you. (Campbell 2002: 116; see also Campbell and Cassam 2014: 18)[15]

Sensationalists deny that this is all there is to phenomenal character. They usually base their case on alleged examples where the presented segment of reality remains constant while phenomenal character changes. [The classic example of this sort is an "inverted spectrum" scenario: see, in particular, Shoemaker (1982) and Block (1990).]

If sensationalism is true, then the phenomenal character of an experience can to some extent float free from the segment of reality the experience (ostensibly) presents, and so its relevance to the epistemic status of beliefs about that segment is entirely unclear. That is why Smithies, a prominent defender of the epistemic relevance of phenomenal character, writes that:

> It is because perceptual experience has the phenomenal character of confronting one with objects and properties in the world around me that it justifies forming beliefs about those objects and properties. (2014: 103)

Since presentationalism can only help the Modernist, we may assume it: phenomenal character (and so phenomenal consciousness) is solely a matter of the (ostensible) presentation of the subject's environment. Is it plausible that the epistemic significance of experience lies in the fact that it is an (ostensible) presentation of the subject's environment?

Smithies argues that it is, on the ground that in cases of superblindsight (as well as actual blindsight[16]), the subject's beliefs about his environment are *not* justified. This is to find Davidson's Challenge quite unpersuasive from the start, since the force of the Challenge rests on the claim that the superblindsighter seems to *not* to be epistemically worse off. Evidently Smithies does not find this claim at all credible. Still, Block does (or did): remember that he describes the superblindsighter as "*just knowing*". And if the superblindsighter knows, then (granted that knowledge entails justification) the superblindsighter's beliefs are justified.

There is much to be said on Block's side. First, "safety" or "reliabilist" accounts of knowledge are appealing, particularly if cast non-reductively (see, e.g., Williamson 2000, ch. 5; Goldman 2008; and the exchange between Williamson

[15] These three quotations appear in Fish (2009: ch. 1).

[16] Drawing any philosophical morals from actual cases of blindsight is a risky business, given that the correct account of the phenomenon is controversial. A recent review sums up as follows: "one conclusion that seems in line with current empirical findings is the suggestion that 'blindsight' is a condition in which some level of preserved visual abilities correlate with severely degraded, abnormal visual experiences" (Overgaard 2012: 612).

and Goldman in Greenough and Pritchard 2009). Granted that these accounts are on the right lines, then since we can suppose that the superblindsighter's beliefs are safe or reliable (on any way of spelling these notions out), they amount to knowledge.

Second, it is anyway very plausible that knowledge—even of contingent facts about the concrete world—does not require any connection to phenomenal character.[17] Block himself gives some examples in the quotation in Sect. 1:

> Some people just know the time or which way is North without having any perceptual experience of it.

Knowledge of directions is unlikely to convince since it is at least initially plausible that perceptual experience (e.g. of the position of the sun and subsequently of one's own motion) has to be involved in knowing which way is North. Knowledge of the passage of time is more persuasive, but the case can hardly rest on one example. So consider self-knowledge, say one's knowledge that one believes that whales are mammals. One familiar point against "inner sense" theories of self-knowledge is that, at least in cases like this, there is no associated phenomenology—one "just knows". (The *cogito* is another example in the same vein.)

Nativism about knowledge provides a different range of examples. Whether human infants have an innate stock of knowledge about physical objects, the minds of others, language, and so forth is a live and hotly debated topic in cognitive science. (We may fairly assume that if there is any such innate knowledge, phenomenal character has nothing to do with it.) Perhaps in some cases "knowledge" is inappropriate because the phenomenon of interest is entirely at the subpersonal level, but it is used freely in the literature and the presumption should be that casting the debate in these terms at least makes sense. (See, e.g., Carruthers 1992.) The point is not that the nativist side has won, but that they appear to have a coherent position which makes testable predictions. Yet if knowledge must be traced back to phenomenal character then nativism is confused from the start.

So much for phenomenal character; what about the somewhat less familiar idea of "phenomenal force"? Siegel and Silins introduce it as follows:

> We can fix on the phenomenal force of perceptual experiences by contrasting it with other kinds of phenomenal character. There seems to be an aspect of the phenomenal character of perceptual experience that is distinct from the phenomenal character of imagery, episodes of wondering, and pangs of desire—even when these states are all directed toward the same thing. Our perceptual experience purports to reveal how the world is, whereas visualizing the dot, wondering whether there is such a black dot in front of you, or feeling a pang of desire for a black dot does not. (2015: 790)

One might well question whether the contrast cases of "imagery, episodes of wondering, and pangs of desire" really do differ in the suggested manner. Be that as

[17] For further considerations, see Lyons (2009: ch. 3).

it may, although *belief* does not have phenomenal force (because it lacks phenomenal character), Siegel and Silin's explanation of phenomenal force makes it hard to see what the epistemic difference between experience and belief could be. Doesn't belief also "purport to reveal how the world is"? And Siegel and Silins make a close comparison between experience and belief themselves:

> Making an assertion is a way to express how you believe things to be. Similarly, perceptual experience is a way to take in how things seem to you to be. Phenomenal force is analogous to assertoric force to the extent that both attach to belief-like states. (791)

Suppose that the "phenomenal force" of experience does not differentiate it, epistemically, from belief. Then phenomenal force is not a justification-maker, since merely believing something is not thereby to be justified in believing it. On the other hand, if phenomenal force gives experience an epistemic advantage over belief, the explanation is elusive.

Finally, there is another problem, which ironically has its source in Modernism's supposed advantage over Traditionalism, namely the dispensability of experiential evidence. "Justified belief" is a term of epistemological art—on the Clapham omnibus, talk of evidence (or, what appears to be equivalent, reasons[18]) is much more natural. One might then expect an explanation of the former in terms of the latter: a belief is justified to the extent it is supported by the evidence. (If a belief amounts to knowledge we may regard this as trivially supported by the evidence, and so justified.) Since one's evidence can lend some support to a false proposition, we have cases where beliefs are (to some degree) justified but are false or otherwise not knowledge. A paradigm case is a situation in which DCI Tennison's fingerprint evidence is misleading and the suspect did not commit the murder; she accordingly has some justification for her false belief.

Consider J.L. in the bad case, where the pig merely appears pink. At least the Traditionalist can say that J.L. has some justification for his belief that the pig is pink, because J.L.'s false belief is nonetheless supported by his experiential evidence. But the *raison d'être* of Modernism is that no experiential evidence is needed—the right kind of experiential causes will suffice. The Modernist is therefore forced to invent a dubious kind of justification-without-evidence; without Modernism, there would be no need for it.[19]

[18] As in "Tennison's reason for thinking that the suspect is the murderer was that his fingerprints were found on the knife"; not in "The reason the victim died was that he was stabbed".

[19] Despite the recent wave of "knowledge-first", justification-without-evidence is taken for granted in much of epistemology, and these brief remarks cannot be expected to make much of a dent. [A terminological distraction is that "evidence" is often used in a technical sense on which Modernists *do* hold that perceptual beliefs are based on evidence, despite this "evidence" being outside the subject's ken; on that issue, this paper is firmly on the side of Williamson (2000: ch. 9.)] One prominent motivation for taking it for granted is worth mentioning, though. As Smithies emphasizes [forthcoming; see also, e.g., White (2014: 311)], we need to find *something* positive to say about J.L.'s belief in the bad case—he would have been in epistemically worse shape if he had believed that the pig was green. But his belief can be given an A for effort without appealing to justification-without-evidence (Byrne 2014b: 104–5; Williamson forthcoming). On justification more generally, see the instructive Sutton 2007.

3.3 The Postmodern View

As just argued, the Modernist's conception of justification is eminently contestable. So, given that Traditionalism is objectionable on other grounds, the natural next step is to find a version of Modernism that treats the bad case and the good case quite differently: in particular, J.L.'s belief is *not* justified in the bad case.[20] But how can that be, if J.L.'s experience in the good case is the same as his experience in the bad case? The Postmodernist's answer is that his experience in the good case is *not* the same—specifically, it is epistemically more potent.

The chief proponent of the Postmodern View is McDowell (e.g. McDowell 1982, 2008, 2011).[21] However, Postmodernism is better presented in a simplified McDowell-inspired version, leaving the subtleties of McDowell's actual view aside.

So far, we have employed the locution "experiencing as if p", understood as non-factive: one may experience as if p even if it is false that p. To reach the Postmodern View, we need a factive conception of experiences. Following McDowell, let us express this with the locution "seeing that p", understood as factive: seeing that p entails that p. (It must be stressed that this is a *technical* use of the ordinary expression "seeing that p".[22]) In the good case, J.L. sees that the pig is pink; in the bad case he merely experiences as if the pig is pink. In the good case, J.L. knows that the pig is pink because he sees that the pig is pink and takes his experience at face value; in the bad case, he merely believes that the pig is pink, without justification.

Of course, this cannot be just a verbal maneuver. "Sees that p" does not mean "experiences that p and it is true that p", otherwise the move to Postmodernism would be sleight-of-hand. Rather, seeing that p is supposed to pick out a genuinely different kind of experience. McDowell explains it this way:

> [In seeing that p] a perceiver enjoys a perceptual state in which some feature of her environment is *there* for her, perceptually *present* to her rationally self-conscious awareness. (2011: 31)

[20] Assuming J.L. knows nothing of his perceptual experiences.

[21] Another Postmodernist is Pritchard (2012). (Both Pritchard and McDowell retain the flavor of Traditionalism's introspective commitments, because they hold that in the good case the subject is in a position to know that she is enjoying the epistemically potent experience (Pritchard 2012: n. 4, 8–10, 13–4); for present purposes this extra baggage can be ignored.) Johnston holds a version of Postmodernism on which epistemically potent experiences "present truthmakers for the immediate judgments we make about those scenarios we are sensing" (2006: 279). He would not agree with the version of Postmodernism explained immediately below, but his position also apparently fails to answer Davidson's Challenge (see note 23). For a view combining elements from Modernism and Postmodernism, see Schellenberg (2013), and for criticism see Byrne (2014b).

[22] McDowell disagrees. One reason for thinking that he cannot just help himself to "sees that p" in its ordinary sense is that it plausibly entails "knows that p". McDowell, as a believer in the experience-belief synapse, cannot accept the entailment (McDowell 2007: 277–8; see also Pritchard 2012: 25–34). Another reason is that even when "sees that p" is used in a distinctively *visual* way, felicitous complements go far beyond what most theorists would regard as "the content of experience", McDowell (now) included (2009: 259). For example: "Looking through the window, I saw that she had just left/was doing yesterday's crossword/was wearing her invisibility cloak". For helpful discussion, see French (2013).

And:

> When one sees something to be so, one is in a perceptual state in which its being so is visually there for one, so that one has a conclusive warrant for a corresponding belief. (31)

The second quotation connects the claim that seeing that p involves the "perceptual presence" of one's environment with an explicit epistemological claim, about "conclusive warrant". More straightforwardly put, seeing that p puts one in a position to know that p:

> [A] perceptual state in which a feature of the environment is present to a subject…put[s] the subject in a position to know, through perception, that things are the relevant way in the environment. (47–8)

The advantage of the Postmodern View is that it dispenses with the Modernist's dubious conception of justification. By the same token, the Postmodernist has more latitude in answering Siegel and Silins' question about the epistemically relevant features of the experience, because she's not constrained to give the same answer in the good and bad cases.

What's more, the Postmodernist's answer to Siegel and Silin's question sounds at first blush entirely satisfactory—the epistemic significance of experience in the good case (namely, when one sees that p) is that it puts one in a position to know that p. But on closer examination, this does not dispatch Davidson's Challenge either.

Return to Block's superblindsighter. Despite lacking the experience-belief synapse, he is epistemically no worse off than those who have it. We can take the Postmodernist's insights about the asymmetry between the good and bad cases on board, and say that while the superblindsighter knows that p in the good case his belief is not even justified in the bad case. Superblindsight has all the epistemic virtues of actual sight (as the Postmodernist conceives it) but with a more streamlined cognitive architecture. The Postmodernist's "seeing that p" is thus a superfluous middleman, and so the Challenge remains.[23]

[23] On Johnston's version of Postmodernism (see note 21), the superblindsighter does not "sense the truthmakers" for his immediate perceptual judgments. Since Johnston seems happy with the idea that "reliably formed" (2006: 268) beliefs amount to knowledge, probably he would not deny that the superblindsighter lacks knowledge, *assuming he is able to make typical judgments about his environment in the first place*. Instead, he might well object to that assumption, on the grounds that sensing truthmakers is required for "singular demonstrative judgment[s]" like *that spoon is bent* (264–5). Even if we grant Johnston the controversial apparatus of truthmakers, it is not clear from Johnston's brief discussion why the superblindsighter could not make singular judgments: if subpersonal processing can deliver *some* information about the environment, what's to stop it delivering information about particular objects? In the absence of an argument at this point, sensing a truthmaker for the proposition that p is as much a superfluous middleman as seeing that p [Subsequently, Johnston significantly amended his view. The sensing of truthmakers is retained, but gone is the commitment to the experience-belief synapse (2011: 203–4), and the epistemic deficiency of superblindsighters is now diagnosed as an "inability to ratify their immediate perceptual beliefs by way of citing appropriate ASEs [Attentive Sensory Episodes, Johnston's version of "experiences"] directed at the truthmakers of those beliefs" (210–11). Johnston's sophisticated and intricate account requires lengthy discussion, which unfortunately it is not going to receive here.].

Consider the following analogy. Suppose you hire me to paint the wall red. I am an experienced painter, standing next to the wall with brush in hand and pots of red paint of various shades. One way to earn my paycheck is to paint the wall crimson. Another way is to paint it scarlet. (All you care about is that the wall ends up red.) If I paint it crimson, you can hardly complain that I should have painted it scarlet—crimson paint is just as easy to apply, and dries just as quickly, as scarlet paint. But if I hire someone *else* to paint the wall crimson, you do have a legitimate complaint. I didn't take an easily available and *more* efficient way to paint the wall red, instead wasting time and introducing further possibilities of a mistake. (The painter might get the wrong paint, or fail to turn up.) The complaint against the Postmodernist is that experience is like the hired painter—she gets the job done, but it would have been easier and simpler to do it myself.

3.4 Summary

It may help at this point to give a brief summary of the three views and how they fare with Davidson's Challenge, using the metaphor of the testimony of the senses.

On the Traditional View, the senses testify that p. One recognizes that the senses are testifying that p, and on the basis of this evidence comes to justifiably believe that p.

On the Modern View, as before, the senses testify that p. However, one does not need to recognize this: provided the testimony appropriately results in one coming to believe that p, one's belief is justified.

On the Postmodern View, in the good case the senses *knowledgeably* testify that p. However, one does not need to recognize this: provided that the testimony appropriately results in one coming to believe that p, one's belief amounts to knowledge.

Of these three, only the Traditional View gives a (potentially) satisfactory reply to Davidson's Challenge. On the Traditional View, the only route to knowledge of pigs is via knowledge of their effects on us, and the only effects we know about are sensory-testifyings, or experiences. The epistemic significance of experience is thus that facts about them are indispensable evidence for hypotheses about pigs and the like.

The Modern View can't locate the epistemic significance of experience in evidence, and the two other candidates—phenomenal character and phenomenal force—lose their appeal on closer examination. At least the Postmodern View performs better on this score: the epistemic significance of experience in the good case is that it puts one in a position to know about one's environment. But the Postmodern View still fails to carve out a significant role for experience, relegating it to an unnecessary epistemic gofer.

4 Removing the synapse

As Davidson says, "[w]hat we must guard against are epistemic intermediaries" (312). Let us then try the experiment of abolishing the synapse. This is not to turn experience into belief, but instead to make belief a constitutive component of

experience, as it is a constitutive component of knowledge. On this doxastic theory of experience, experiencing as if p entails believing that p, as knowing that p entails believing that p. In the case of knowledge, the constitutive claim does not imply that knowledge decomposes into belief plus something else; likewise, the parallel claim for experience does not imply that experience decomposes into belief plus something else.

The reason why the doxastic theory is almost universally rejected is that it allegedly conflicts with the phenomenon of known illusion: spots appear to be moving, say, but one believes that they are not moving. Assuming one does not have contradictory beliefs, one does not also believe that they are moving. One has, then, an experience as if spots are moving, but does not believe that spots are moving. But this description is resistible, as Armstrong observed:

> If a thing looks a certain way, although we may know on independent grounds that it cannot actually be that way, we may still half-believe, or be inclined to believe, that it is as it looks…What is an inclination to believe? I think it is nothing but a belief that is held in check by a stronger belief. (Armstrong 1968: 221)[24]

The idea that the belief that p might be "held in check" by the "stronger belief" that not-p is not ad hoc, since it arguably applies elsewhere, notably in some cases of delusions and other irrational beliefs (see especially Bortolotti 2010).

The doxastic theory dovetails nicely with the evolution of perceptual systems, at least if one is unmoved by the reluctance some philosophers have felt to attribute beliefs to other animals. There are non-human perceivers (perhaps other primates) who, it is safe to assume, cannot resist the testimony of their senses: for them, seeing is always believing. These animals betray no hint of an experience-belief synapse—accordingly, the doxastic theory is a perfect fit for them. But once the doxastic theory is conceded in this case, given the way evolution works, one would expect that cognitively sophisticated creatures like ourselves have simply developed the ability to inhibit the beliefs which are constitutive of perceptual experience. We haven't evolved a new kind of perceptual experience that does not constitutively involve belief; we have just overlaid an inhibitory mechanism over the old kind.[25,26]

[24] Armstrong makes an heroic attempt to "analyze" perceptual experience in terms of the "*acquirings* of belief" (1968: 214); the doxastic theory in the text has no such reductive ambitions. And in any case Armstrong's position is incompatible with the doxastic theory, since he thinks that there are cases of experience with only "the acquiring of a *potential belief*" (223). For two other examples of accounts that tie belief closely to perceptual experience, neither of which is the doxastic theory in the text, see Glüer (2009), Lyons (2009: ch. 4).

[25] It should be emphasized that the doxastic theory is not committed to the claim that if a tree stump "looks to be a pig" in an intuitive sense, but one knows that the stump is *not* a pig, one nevertheless also believes that it *is* a pig. The doxastic theorist may well take on board the view that the contents of experience are thin, and do not concern pigs as such (see note 1).

[26] Another worry about the doxastic theory is that it fails to accommodate the alleged fact that experience has "nonconceptual content", thought of as a kind of content that cannot be believed. But here there is plenty of room for dispute, pro and con nonconceptual content—[see, e.g., Speaks 2005; Byrne 2005 (con); Van Cleve 2012 (pro)].

4.1 Does removing the synapse help?

Does the doxastic theory help with Davidson's Challenge? The Challenge got going because the orthodox picture has three causally related parts: subpersonal processing, experiencing as if p, and believing that p. The problem was then finding a significant epistemic role for the intermediary, experiencing as if p. We have now replaced these three parts with two: subpersonal processing and experiencing as if p (this latter entailing believing that p). One might think this has brought little advance: isn't the Challenge just as potent as before? True, experience is no longer an apparently superfluous insertion in the causal chain ending in belief: experience does not *cause* belief, but rather constitutively involves belief. Still, what epistemic work is *experiencing that p* doing?

One lesson from our discussion of Modernism is that it isn't doing *any* work. The assumption that the epistemic significance of experience has to cover both the good and bad cases is mistaken. If experience has epistemic significance at all, it is confined to the good case. So the relevant conception of experience is not experiencing that p (construed as entailing *belief*), but something closer to McDowell's "seeing that p" (construed as entailing *knowledge*).[27]

Consider J.L in the good case. He knows that the pig is pink "by perception". With the synapse in place, knowing that the pig is pink by perception is not, intuitively, an *experiential* state. It is a hybrid, the state of being appropriately caused to know that the pig is pink (nonexperiential) by experiencing as if the pig is pink (experiential), or (as on the Postmodern View) by "seeing that the pig is pink" (also experiential). (An analogy: the state of *being caused to be red by something square* is neither a pure chromatic state or a pure geometric state, but instead a hybrid of a chromatic state and a geometric state.[28])

With the synapse removed, when one knows that p by perception, say that one *senses* that p.[29] Sensing that p entails both *experiencing as if p* and *knowing that p*. Is sensing that p a hybrid of experiential and non-experiential components? Plausibly, no. Here is one suggestion: sensing that p is the conjunctive state of *experiencing as if p* (experiential) and *knowing that p* (non-experiential). But this is wrong. Imagine that J.L. is looking at a pink pig, although the lighting is too dim to make out its color. However, J.L.'s brain is tickled so that he has an experience as if that (the pig) is pink. Further, he knows (from testimony, say) that the pig is pink. Accordingly, he is in the conjunctive state *experiencing as if the pig is pink and knowing that the pig is pink*, yet he does not know that the pig is pink *by* perception—he does not "sense" that the pig is pink.

[27] For a similar view (albeit set out using "seeing that p" in its ordinary sense), see Stroud (2011).

[28] Since the hybrid state is specified in terms of the chromatic state, the geometric state, and the relation of causation, Fricker (2009: fn. 4, 31–2) calls such states "three-component hybrids". Williamson's well-known argument that many mental states are "prime" is only intended to establish that they are not "two-component hybrids", conjunctions of narrow mental conditions with environmental conditions (Williamson 2000: ch. 3; cf. also Williamson 2009: fn. 1, 294).

[29] Johnston (2006: 268) uses this terminology to formulate Postmodernism.

Sensing that p has all the hallmarks of an experiential state in its own right, with two epistemically valuable features. First, it is a *way of knowing* that p, as that notion figures in Williamson's proposal that:

> if one knows that p, then there is a specific way in which one knows; one can see or remember or…that p. Although that specific way may happen to lack a name in our language, we could always introduce one, perhaps pointing to the case as a paradigm. (Williamson 2000: 34; schematic letter changed)

Sensing that p is a way of knowing that p in the sense that it is an unanalyzable factive mental state that entails (but is not entailed by) knowing that p.[30]

Second, when one senses that p one's knowledge that p is *available* to guide reasoning and/or action—unlike knowledge in memory that may be hard to retrieve. Sensing that p, then, is an experiential state that supplies *available knowledge* of one's environment. It is in essence the same as McDowell's "seeing that p", absent the experience-belief synapse. But sensing, unlike McDowellian seeing, does answer Davidson's Challenge. To go back to the analogy at the end of Sect. 3.3, sensing that p solves the problem of equipping the organism with knowledge that p just as painting the wall crimson solves the problem of painting the wall red. Perhaps there are other effective ways of solving the problem, just as there are other effective ways of painting the wall red, but with the synapse gone there is no threat that sensing involves a superfluous middleman.

To confirm this, return to the superblindsighter. He lacks experiences as conceived on the orthodox picture, yet (as argued) is epistemically unscathed. So, with the synapse in place, experiences play no useful epistemic role—at best, they do little harm. Now the synapse has been removed, does a threat from superblindsight remain?

Note, first, that the possibility of superblindsight has now become quite contentious. On the present conception of experience a superblindsighter's visual information processing is the *same* as ours—not just similar, as it is on the orthodox picture. So the possibility of superblindsight can only be motivated by a general claim about the independence of phenomenal character from information processing. And, second, this is anyway the standard zombie worry about the irrelevance of phenomenal character, which (as explained in Sect. 2) is not relevant to the issue of this paper.

The fundamental problem with the orthodox picture is that the most experience can do is (inefficiently) *enable* knowledge. On the rival account defended here, experience can do more—when things go well, it is a way of knowing.

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[30] Cassam (2007) objects to Williamson's account and offers a rival "explanatory conception" of ways of knowing. French (2014) convincingly argues that Cassam's and Williamson's accounts are complementary, not rivals.

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