Morrison - Perceptual Confidence

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§1 - Introduction

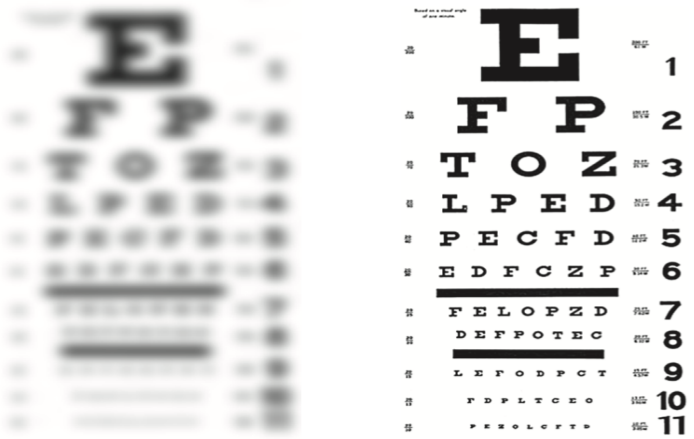
Goal of the paper: defend Perceptual Confidence

PERCEPTUAL CONFIDENCE our perceptual experiences assign degrees of confidence

POST-PERCEPTUAL CONFIDENCE while our perceptual experiences represent external objects and their properties, they do not themselves assign degrees of confidence

Initial cases motivating Perceptual confidence:

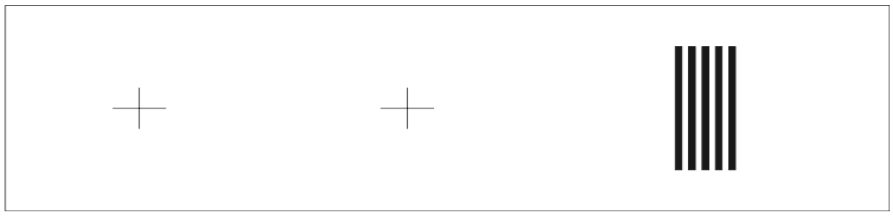
1. In a dark room, a light slowly becomes brighter. You slowly transition from being highly confident the light is off to highly confident that it's on. This shift exists in both your experience and your beliefs.[1]
2. In poor lighting conditions, you aren't sure whether the tablecloth is red or brown. As lighting increases, you become confident that it's not only red, but that it's crimson. This shift exists in both your experience and your beliefs.
3. Your poor eyesight makes the optometrist's chart appear blurry, so you're not sure whether it's an E or a D. As the lenses change to become better suited to your condition you become more confident that it's an E. This shift exists in both your experience and your beliefs.



[1] NB this last bit is what's essential to supporting Perceptual Confidence; the first part is perfectly consistent with Post-Perceptual Confidence.

4. You roll a basketball in a straight line, and it stops after five seconds. When asked its distance you might report near certainty that it rolled between 6 m and 10 m but less confidence in any of the particular distances in that range. If you roll another ball and it stops farther away, your reported confidence in the second ball's distance will be distributed over a wider range. These reports seem to reflect your decreased perceptual confidence. Objects sometimes look as though they could have one of several locations, some more likely than others.

5. Hold this paper four inches away, center the far-left cross between your eyes, look straight ahead. How many bars are in the right side of your visual field?



Most people report: between 2 and 10 bars, probably 6, with confidence distributed between those options. This distribution occurs both in belief and in perception.

For the same phenomenon but with a *shape* property rather than *number*, look at the cross, estimate ratio of width to height:

Now estimate which shape on the left best matches the shape on the right:

§2 – Clarifications

Clarifying the Perceptual Confidence hypothesis:

1. PERCEPTUAL CONFIDENCE is more fully described as the view that confidence is assigned by a state that's conscious, automatic, accessible, dissociable from doxastic states, directed toward perceived objects and properties, and fast enough that we can't detect any delay.

2. PERCEPTUAL CONFIDENCE does not imply that all (or any) our experiences assign less than full confidence. Experiences that assign full confidence still assign a degree of confidence. But the examples motivate perceptual experiences assigning less than full confidence.

3. when our experiences assign less than full confidence, they assign confidence to at least one other possibility. In simple cases, our experiences assign confidence to a possibility and its negation, like that it's Isaac and that it's not Isaac, or that the light is on and that the light is off. In other cases, our experiences assign confidence to more possibilities. If Isaac looks a lot like your other friend Aaron, your experience might assign confidence to the possibility that it's Isaac, the possibility that it's Aaron, and the possibility that it's neither.

4. what is it for our experience to assign degrees of confidence? (he'll deal with this below)

5. Consider:

   CONFIDENTIALISM if two experiences have the same phenomenology, they assign confidence in the same way.

   Perceptual Confidence does not entail Confidentialism, but it's natural to think that they go together

6. PERCEPTUAL CONFIDENCE doesn't commit one to any view about the underlying computations...PERCEPTUAL CONFIDENCE is about our conscious, perceptual experiences, not the computational processes in the brain that give rise to them.

§3 – Post-Perceptual Confidence

Why do people accept PPC? Morrison's best guess:

> It is natural to think that perceiving is like painting in that, just as you can't simultaneously paint a surface uniformly crimson and scarlet, you can't simultaneously perceive a surface as crimson and scarlet. Likewise, it is natural to think that, just as you can't simultaneously paint an oval that has two elongations, a letter that's an E and a D, or a series of lines consisting entirely of four bars and five bars, you can't simultaneously perceive an oval as having two elongations, a letter as an E and a D, or a series of lines as consisting entirely of four bars and five bars. This might seem to preclude assigning degrees of confidence to alternative colors, shapes, elongations, and numbers of bars. Assignments of confidence would then have to be post-perceptual. (23)

And his response:

> ...temporarily set aside degrees of confidence. Everyone should agree that when you perceive the rolled ball, you perceive a range of distances (e.g., 6m to 10m) without perceiving the ball as simultaneously at every distance in that range. Likewise, everyone should agree that when you perceive the tablecloth, you can perceive a range of colors (e.g., medium red to dark red) without perceiving the tablecloth as simultaneously instantiating every shade in that range. As these examples suggest, you can perceive multiple possibilities without simultaneously perceiving each possibility as actual. When you perceive multiple possibilities, your relation to a possibility isn't the same as when you perceive it alone. As a result, it's unclear why perceiving the ball as *more likely* 7m away than 6m away would imply that you perceive that it is simultaneously at both locations, and it's unclear why perceiving the tablecloth as *more likely* crimson than scarlet would imply that you perceive it as simultaneously crimson and scarlet. It can't be the mere fact that confidence is involved, because you can *believe* that the ball is more likely 7m away than 6m away without believing that it is simultaneously at both locations, and you can *believe* that the tablecloth is more likely crimson than scarlet without believing that it is simultaneously crimson and scarlet. It also can't be the mere fact that your experience has only one phenomenal character, because experiences involving less than full confidence might have their own, distinctive phenomenal characters (see our previous discussion of CONFIDENTIALISM). Their phenomenal characters aren't the result of somehow super- imposing several phenomenal characters, for example the phenomenal character of perceiving the ball as 6 am away and the phenomenal character of perceiving the ball as 7m. (24)

§4 – Is third-personal data enough?

Third-personal data = something other than introspection; generally the sort of data an empirical psychologist might use

Two types of third-personal data:

behavioral observations of the behavior of subjects, specifically judgments about whether felt objects are the same shape as viewed objects

- PC can explain behavioral data, but so can competing theories:

  > By studying the links between stimuli and reports, psychologists have accumulated overwhelming evidence that our reports are based on assignments of confidence. But their data don't indicate whether the relevant confidence is assigned pre-perceptually, perceptually, or post-perceptually. Perhaps this reflects an inherent limitation in behavioral data, because statistical correlations between stimuli and reports can't reveal the role of consciousness. Or perhaps it's a merely contingent limitation, because psychologists haven't been clever enough, or because their technology hasn't advanced far enough; perhaps future methodological and technological advances will allow us to design experiments that settle the debate about PERCEPTUAL CONFIDENCE. Regardless, we currently need to support or undermine PERCEPTUAL CONFIDENCE in another way. (26)

imaging FMRI scans of brains of agents who are assigning degrees of confidence and having perceptual experiences. This would allow us to see of the same parts of the brain light up for both activities.

- but that's impossible:

  > ...we don't know which activities in the brain underlie consciousness, so even if we knew which parts of the brain are responsible for assigning degrees of confidence, we wouldn't know whether the confidence was assigned before, during, or after our conscious perceptual experiences. (26)

§5 – Support for Perceptual Confidence

Point of this section: argue directly for PC via IBE

Setup for the argument: say that you *completely trust* your experience iff your *doxastic* confidence matches your *perceptual* confidence[2]

Case: you completely trust your experience, in the sense of endorsing its content. A person walks towards you who looks like your friend Isaac, but at first he's too far away for you to be sure.

Explanandum: as he approaches your *doxastic* confidence that it's Isaac increases, ultimately becoming nearly certain.[3]

Simple explanans available to Perceptual Confidence:

- according to PC, your *perceptual* confidence that it's Isaac increases as he approaches
- stipulation of the case: you completely trust your experience, i.e. your *doxastic* confidence mirrors your *perceptual* confidence
- so, as he approaches your *doxastic* confidence that it's Isaac increases, ultimately becoming nearly certain.

No simple explanans available to Post-perceptual Confidence.

- according to PPC, your experience either represents that it's Isaac or it doesn't
- stipulation of the case: you completely trust your experience, i.e. your *doxastic* confidence mirrors your *perceptual* confidence
- so, at the point that your experience comes to represent that it's Issac approaching, you become certain that it's Isaac

BTM:

In order to set things up neutrally, he needs there to be a sense of 'completely trusting' or 'endorsing' your experience that's neutral between PPC and PC. Does he satisfy that demand?

- In discussing PC, he clearly intends 'completely trusting' to mean something like matching doxastic and propositional confidence levels
- But PPC doesn't claim that all perceptual confidence levels are either 1 or 0 – it claims that perception doesn't include perceptual confidence levels at all.
  - remember: he said above that it's consistent with PC that all perceptual experiences have confidence levels of 1

[2] Understood here as neutral between PC's graduational account of perceptual confidence, and PPC's categorical account.

[3] NB: there's no *epistemic* angle to the case - he's purely describing what in fact happens when you have the series of experiences described.

- so, we can't understand PPC's 'completely trusting' experience as matching doxastic and propositional confidence levels

Can we pose the puzzle without appeal to 'completely trusting' experience, thereby avoiding this difficulty? After all, the approach of Isaac does seem to warrant increasing levels of doxastic confidence that it's Isaac who is approaching.

Looks problematic.

There are at least two explanatory resources available here:

1. degree of perceptual confidence represented in the experience itself (if any)
2. degree to which an experience warrants the agent in believing its content

PPC-ers can try to explain your doxastic response in terms of (2): your experience of Isaac's approach represents that it's Isaac the whole time, but leads varying levels of trust in that representation due to further features of the experience that have nothing to do with perceptual confidence, e.g. clarity, blurriness, recognizability. In that case don't 'fully trust' your experience until he's right in front of you.

JM's likely motivation for talking about 'fully trusting' your experiences is to rule out this kind of move, leaving the PPC-er without the resources to explain the datum, forcing them to reach for (1), which is tantamount to abandoning PPC for PC. But if there's no neutral sense of 'fully trusting' experience in the first place then there's no neutral way to rule out (2), so the strategy falls apart.

After his initial exposition of the puzzle he goes on to consider alternative versions of the PPC-er's response. Here he seems to be trying to work out that response by exploiting resource (2). But it's not straightforward, as he occasionally appeals to 'completely trusting' again, which he shouldn't do if my reading is correct. Ideas?

end BTM

Is there a non-simple explanans – one in terms of the content of the experience alone – available to the PPC-er? Five tries:

Indeterminacy several varieties here:

Indeterminacy (1) your experience represents that it's Isaac *indeterminately* because it represents that either it's Isaac or it's Aaron

problem: this is still pretty coarse-grained, can't explain fine gradations in confidence as Isaac approaches

Indeterminacy (2) your experience is representing Isaac is for your experience to represent a type of object and for Isaac to be a borderline instance of that type.

problem if you're placing complete trust in your experience, then you shouldn't end up with more than fifty percent doxastic confidence it's Isaac.

BTM Oops! Slipped into talking about the *epistemology* of the case, rather than sticking to pure description. Might this approach work out for the PPC-er after all?

Indeterminacy (3) your brain to be in a state that falls between representing Isaac and not representing Isaac, like a light switch positioned between on and off.

problem if you're placing **complete trust** in your experience, it's unclear why you'd end up with slightly more confidence it's Isaac.

BTM: can't appeal to 'complete trust' considerations! That's back to a non-neutral presentation of the puzzle!

Access maybe my experience represents that it's Isaac, but I don't have access to that fact, and this explains why I'm less than fully confident it's him

problem what explains this access failure?

first proposal maybe the vehicle of representation differs between far-away-Isaac and near-Isaac,[4] and we have differing degrees of access to different vehicles, as we analogously have differing access to the contents of a painting when it's near or far

problem with the first proposal this again takes the analogy between perceiving and painting too far. We can discover that a painting contains a minuscule and fully formed image of a certain historical figure by moving closer to the canvas. But you can't 'move closer' to your own experiences. More generally... there's no reason to think that your experience contains minuscule and fully formed images of particular people, and that these images retain the same level of detail as they grow. If we describe our experiences as containing images, it is more plausible that when Isaac is far away our experience contains a blurry and incomplete image that doesn't yet have enough detail to represent Isaac rather than someone else.[5] There are also general problems with such models of experience, such as their tendency to collapse into sense-data theories, because we're directly aware of images in our visual field rather than people out in the world. (30)

[4] JM imagines 'minuscule images' as the vehicle of far away things.

[5] This is a discussion at a very high level of generality, to the point that I'm not sure how valuable it is. Why can't a blurry and incomplete image represent an individual? Isn't an impressionist painting of Winston Churchill still a painting of Winston Churchill? Is he assuming that content supervenes on phenomenology? One could imagine a much more plausible version of this response from the PPC-er: a single content (e.g., Churchill) can be represented by many different experiences/ images, and some make their contents more obvious than others, so instances of that range of experiences/ images vary in the degree to which they make one confident that the content is being represented. Is JM being fair to this obvious version of the view?

second proposal you can't know your experience is representing Isaac [rather than Aaron], because your experience is subjectively indistinguishable from experiences that represent other people (30) (as claimed by disjunctivists)

problem with the second proposal that's implausible: experience of Isaac *feels like* an experience of Isaac, and same for an experience of Aaron. So they're not indistinguishable.

Belief deny the datum: you don't completely trust[6] your experience and instead your new belief is caused by a combination of your experience together an antecedent belief such as: *if my experience represents Isaac as F, I should have 55 percent confidence it's Isaac*.

[6] Note that JW is again appealing to the idea of completely trusting your experience, which I above argued is problematic for his argument. Is he making a mistake, or is there another way to interpret his argument?

problem it doesn't seem as though you're relying on an antecedent belief

- you don't feel as though you're resisting your experience, such as when an object looks red but you're certain it's white
- you don't feel as though you're discounting your experience, such as when an object looks red but you believe your experience is unreliable

problem the proposal explains away differences in strength of perceptual belief by appeal to differences in background belief. But sometimes we get the former without the latter:

> [when you believe Isaac is out of town and then you see his doppelgänger, you might say] 'I know he's out of town, but that really looks as though it could be Isaac.' When the lookalike is standing directly in front of you, the feeling will strengthen, and it will incline you to have even more confidence it's Isaac.

So, change of confidence that it's Isaac without a change in background belief

Poverty deny that experiences have singular contents/ represent particular objects: experience represents only bundles of colors and shapes, and recognition always occurs at the level of belief.

problem suppose that's right, and experience doesn't represent particular objects such as Isaac. Still, the puzzle recurs with whatever[7] properties your experience does represent. Example: you completely trust your experience of an elongated oval, end up with doxastic confidences with a bell-shaped distribution over particular elongations.

[7] Too strong?

PC's explanation your perceptual confidences are bell-shaped, and you endorse your experience

PPC's explanation ...

Not Confidence experience assigns degrees of *something*, but not degrees of *confidence*

response three reasons to think it's degrees of *confidence* that are assigned by perception

1. if an experience assigns a high degree of emphasis and endorsing that experience yields a high degree of doxastic confidence, then the simplest explanation is that emphasis is a kind of confidence.
2. other sources of doxastic confidence have degrees of confidence. E.g. testimony, which can be offered more or less confidently.
3. ...one might argue that, like degree of doxastic confidence, degrees of emphasis are more or less ideal to the extent they preserve the axioms of probability theory.[8]

[8] JM doesn't actually offer an argument, just suggests that one might.

§6 – Consequences of Perceptual Confidence

6.1 - Intuitions and actions

Analogues of Perceptual Confidence:

Intuitive Confidence intuitions present their contents with varying degrees of confidence, which are themselves independent of belief[9]

[9] Independent in the sense that one might have the intuition that incest is immoral, but not believe it.

Action Confidence feelings of being able to perform actions (e.g. reach out and grab the salt shaker) come in various degrees, independent of your belief[10]

[10] Independent in the sense that one might have the feeling that you are able to grab the salt shaker, but not believe it, (e.g. because you know there's an invisible forcefield in the way.

6.2 - Perceptual Contents

Traditional (i.e., since the 80's or so) account of perception: it' a relation between an agent, S, and a proposition, p: $R_{(S,p)}$

You'll notice there's no place for a degree of confidence in there, so Perceptual Confidence necessitates a revision to the traditional picture.

Possibilities:

1. We could reconceive of perceptual entertaining as a three-place relation between a subject, proposition, and degree of confidence.
   - $R_{(S,p,.7)}, R_{(S,\neg p,.3)}$

2. we could replace the perceptual entertaining relation with a series of relations indexed to various degrees of confidence, such as perceptually-entertains-with-fifty-percent-confidence and perceptually- entertains-with-forty-percent-confidence.

   - $R^{.7}(S, p), R^{.3}(S, \neg p)$

3. we could reconceive of perceptual entertaining as a many-place relation to a number of propositions and their associated degrees of confidence.

   - $R_{(S,<p,.7>,<\neg p,.3>)}$

4. your experience's propositional content includes a component such as:

   > This experience assigns fifty percent confidence that the ball is 8m from my head.

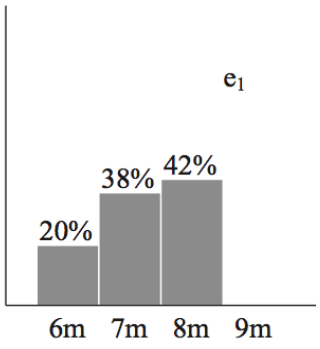
   - R(S, This experience assigns fifty percent confidence that the ball is 8m from my head), R(S, This experience assigns fifty percent confidence that the ball is **not** 8m from my head)

6.3 - Accuracy Conditions

If contents of perceptual experience are propositions (as with the Traditional account), the accuracy is simple: $R_{(S,p)}$ is accurate iff p.

Things are more complicated once Perceptual Confidence is accepted. Example:

"...suppose your experience of the ball represents only four possibilities: that the distance to the ball is 6m, 7m, 8m, and 9m. (as below)



When is e1 completely accurate? It depends how we're calculating accuracy. If we value only the confidence e1 assigns to the ball's actual location, then it is never completely accurate, because it is most accurate when the ball is 8m away and even then is less accurate than experiences that assign full confidence to 8m. Thus, if we value confidences in this way, e1 is never completely accurate and therefore lacks accuracy conditions. Alternatively, if we equally value the confidence e1 assigns to distances within 1m of the ball's actual distance, then it is completely accurate

when the ball is 7m away. Thus, if we value confidences in this way, e1 can be completely accurate, and therefore has accuracy conditions. Moreover, **there seems to be no unique, objective way of deciding between these different ways of valuing confidences; we'd have to choose arbitrarily or rely on interest-relative considerations. Thus, there seems to be no objective fact about whether this experience has accuracy conditions. For the same reason, there's no objective fact about when e1 is maximally accurate.**" (39)

JM goes on to draw a comparison: whether the statue is beautiful is relative to various standards of beauty (we might suppose). Similarly,

> according to proponents of PERCEPTUAL CONFIDENCE, there are often no objective facts about accuracy conditions. Whether an experience is completely or maximally accurate in one condition or another is often relative to how we're evaluating accuracy, and there's often no objective way to choose. PERCEPTUAL CONFIDENCE thus leads to a kind of relativism about accuracy conditions.[11]

[11] It seems clear that the proponent of PC *can* say this, but JM seems to think that they *must*. Why?

6.4 - Veridical and illusory experiences

On the Traditional account, there's a sharp distinction between veridical and illusory experiences: an experience as of p is veridical iff p, and otherwise it's illusory.

If PC is correct, then the distinction between veridical and illusory experience is 'superficial and fuzzy'.

- even if there's an objective fact about the relative accuracy of a set of experiences, the boundary between veridical and illusory is vague

6.5 - Metaphysics of perceptual experience

Three reasons PC is inconsistent with disjunctivism:

1. according to most disjunctivist views, experiences involve relations only to present objects and the properties they instantiate. PERCEPTUAL CONFIDENCE implies that many experiences, including some veridical experiences, involve relations to objects that are absent (or even non-existent) and properties that are uninstantiated.
2. according to most disjunctivist views, experiences do not involve relations to abstracta, such as numbers. But PERCEPTUAL CONFIDENCE implies that they do.

3. disjunctists think there's a sharp boundary between illusion and veridical experience, and this is really important to their account. PC-ers deny the existence of a sharp boundary.

6.6 - Further questions

[this is all just cut-and-pasted]

1. We'd like to know the extent to which our perceptual confidences are influenced by our background beliefs ("cognitive penetration") and the extent to which it's influenced by hardwired assumptions.
2. We'd like to know whether our perceptual confidences exhibit signs of learning. Phoneme perception is a plausible example. We're more confident a physically ambiguous sound was one phoneme rather than another if we just heard that phoneme.
3. We'd like to know whether, at a computational level, our visual system is exploiting Bayes's Theorem, and, if so, what fixes the values of the priors. Building on the questions listed above: Are the priors informed by our beliefs? If not, do they nonetheless change over time, perhaps as a result of learning? Or are they hardwired?
4. We'd like to know the extent to which our perceptual confidences are non-ideal – e.g., whether they assign confidences to competing possibilities that sum to less than one hundred percent.
5. We'd like to know when and why our experiences treat events as more or less dependent. When you look at the tablecloth under candlelight your might be perceptually uncertain whether it is crimson or scarlet but perceptually confident that it is the same color everywhere. Thus, the colors of the tablecloth's regions are dependent events.
6. We'd like to know whether there are absolute minima. Just as there are spatial locations too small for our experiences to represent them, there might be degrees of confidence too small for our experiences to assign them. More generally, we'd like to know which degrees of confidences our experiences can assign. Any degree along a continuous scale? Or only certain degrees, separated by fixed jumps?
7. We'd like to know whether perceptual uncertainty is the result of computations involving either a single measurement or a series of measurements. If it's the result of a series of measurements,

we'd like to know whether it's the mean, variance, or some other function that's the basis of the relevant computations.

8. We'd like to better understand the distinction between assigning zero confidence to a possibility and failing to represent that possibility.

9. We'd like to know more about the relation between perceptual confidence and perceptual phenomenology. CONFIDENTIALISM is just a first step.