

Probabilistic anti-dogmatism: White

JUSTIFICATION RECONSIDERED. White intends to restore the requirement of ‘ antecedent justification ’ we saw in Pryor, here called ‘ independent justification ’.

Looking at the end of one’s arms, and they appear to be hands, raises the question whether I am thereby justified in believing that these are hands. I can imagine possible scenarios in which it falsely appears that I have hands. These are ‘ sceptical alternatives ’: hypotheses inconsistent with P such that if it were true, it would still appear to me that P . For example: being a handless brain-in-a-vat artificially fed experiences, or having hands replaced by plastic replicas.

To the extent that I have a reason to suppose that one of these sceptical alternatives is correct, perceptual justification for supposing that one has hands is undermined (=sceptical scenarios are BAD, as Pryor said).

We are concerned with ‘ propositional justification ’: belief in P is the appropriate attitude to take given the subject’s current epistemic state, if they are to take any attitude toward it. This justification need not be conscious and articulated: you can have justification for a proposition P without explicitly believing or even considering it.

Example 1. It might never occur to you that your hand is flesh and bones, not a plastic toy etc. But given general knowledge that most people have hands and the difficulty of switching hands, you *are* justified in believing that your hand is not plastic/fake.

The crucial question is whether, for a visual hand-experience to provide justification for hand-belief, the subject must have justification for denying the alternative sceptical hypotheses that is ‘ independent ’ of this visual experience. This independent justification is that which is available apart from the subject’s seeing what appear to be hands.

Remark 2. So far we have merely restated the dialectics of Pryor’s paper.

DOGMATISM RECONSIDERED. According to dogmatism, hand-experience (absent *already available* reasons to suspect a perceptual illusion) is sufficient to justify hand-belief. You need not be in a position to justifiably rule out a BAD scenario (=BIV etc.). Then:

(15-1) Sceptical alternative: For the subject S , H is a sceptical alternative for S to the proposition P , if:

- (i) H is inconsistent with P ($H \Rightarrow \sim P$),
- (ii) if H were true, it would still have appeared to S that P .

Dogmatism: For certain contents P , if it appears to S that P , and S has no reason to suspect that any sceptical alternative to P is true, then S is justified in believing P , regardless of whether S is independently justified in denying any sceptical alternative.

CLOSURE AND CIRCULARITY. We are working with the following argument:

(15-2) Hand-1: It appears to me that this is a hand.

Hand-2: This is a hand.

Hand-3: This is not a fake-hand.

Question 3. Compare this argument to Wright’s I-II-III pattern.

According to dogmatism, Hand-1 is sufficient to justify belief in Hand-2, even if the subject initially lacks justification for Hand-3. Since Hand-2 entails Hand-3, once justified in Hand-2, the subject is also justified in believing Hand-3. This relies on a closure principle:

(15-3) Justification Closure: If S is justified in believing P , and can tell (=believes) that $P \Rightarrow Q$, then: S is justified in believing Q .

This principle is very plausible. Suppose it is false. Then I have to be more confident about P than about Q , though I also believe that it is impossible for P to be true when Q is false.

Now, supposing we accept (15-3), the objection is this: If dogmatism is true, I am justified in believing Hand-3 for the first time (*ab initio*) merely by having a hand-experience. But this is odd, because I would have had the same experience if I had a fake hand. To substantiate this oddity, we interpret the dogmatist as engaging in the following argument:

(15-4) Here is my hand. How do I know that it is a *hand*, not a plastic toy looking like a hand? Well, it looks like a hand, hence it *is* a hand.

(15-5) Compare: Here is the Mona Lisa. How do I know that it's not a forgery that looks exactly like the Mona Lisa? Well, it looks like the Mona Lisa, hence it *is* the Mona Lisa.

No-one should be convinced by this kind of argument. Yet, since that's the argument that the dogmatist seems to offer, dogmatism is similarly unconvincing.

White replies (I think) that an argument like (15-4) is unpersuasive, yes, but not in the way that's damaging to dogmatism. The dogmatist can't *persuade* you that he has hands, but that's expected: his justification is 'immediate', so that he doesn't have reasons to use in persuading you. Incidentally, the situation is different with (15-5), since I *am* expected to cite reasons why my Mona Lisa is not a forgery. That is (I think) because I don't have an immediate justification for knowing that the Mona Lisa is in front of me.

Question 4. Locate the relevant part of Pryor's paper that addresses exactly this issue.

Question 5. Under what conditions, if any, could I have an immediate justification for 'This is the Mona Lisa'?

Another, very natural way to approach (15-4) is to think of it as circular. Sensory evidence is a guide to reality provided it is reliable. But the question is exactly whether it *is* reliable.

Well, this is tricky. Consider:

- (15-6) (I) I see: [~~various shapes on the paper-like surface~~].
- (II) I read, 'SB's eye-sight is good.'
- (III) I conclude, 'My eye-sight is good.'

You might argue that this inference is circular, since I justify my evidence-gathering 'method' in (III), while relying on that 'method' in (II). But the circularity here, if there is any, should better be OK—how else could I learn that my eye-sight is good?



Vicious circularity occurs exactly when there is a type-(I) proposition required first to establish (II), such that it itself requires (III). So the question is whether the dogmatist inference (15-2) involves the type-(I) proposition.

PROBABILISTIC REASONING. Dogmatism implies that when it appears there is a hand (Hand-1), confidence in Hand-3, that it is not a fake-hand, should increase. White argues that confidence in Hand-3 should instead *decrease*, because Hand-1 is exactly what a fake-hand should look like.

Well, this is surprising! So what's the trick? First, why would you think that your confidence in Hand-3 increases? Presumably you appeal to the following principle:

(15-7) Confirmation closure: If E confirms H , and H entails H' , then E confirms H' .

But (15-7) is false. To see this, notice first that:

(15-8) $[p \& q] \Rightarrow p$.

Then let $H = H' \& E$. We get:

(15-9) E confirms H , and by (15-7) and (15-8), E confirms H' .

But since H' is arbitrary, we get the absurd result that our evidence confirms any hypothesis whatever.

Question 6. Explain the reasoning here.



Question 7 (Advanced). As White notes, the failure of the confirmation closure is derived from Hempel's paradoxes of confirmation. Consult Hempel's paper and explain how Nicod's criterion combined with the Equivalence condition generates these paradoxes. Then explain the connection to the failure of (15-7).

Now let's go back to (15-2). First, recall Bayes's Theorem:

$$P(H | E) = \frac{P(H) P(E | H)}{P(E)}.$$

Then note:

$$(15-10) \quad P(\text{Hand-1} | \sim\text{Hand-2}) \approx P(\text{Hand-1} | \sim\text{Hand-3}) \approx 1.$$

On the other hand, hand-experiences confirm both the existence of hands and of fake-hands:

$$(15-11) \quad P(\text{Hand-1} | \text{Hand-2}) > P(\text{Hand-1})$$

$$(15-12) \quad P(\text{Hand-1} | \sim\text{Hand-3}) > P(\text{Hand-1}).$$

Then by Bayes' Theorem we have:

$$(15-13) \quad P(\text{Hand-2} | \text{Hand-1}) > P(\text{Hand-2})$$

$$(15-14) \quad P(\sim\text{Hand-3} | \text{Hand-1}) > P(\sim\text{Hand-3}).$$

Question 8. How, exactly, do we get these inequalities?

Now notice that:

$$(15-15) \quad P(\text{Hand-3} | \text{Hand-1}) = 1 - P(\sim\text{Hand-3} | \text{Hand-1}). \text{ [the law of total probability]}$$

So, from (15-14) and (15-15) we get:

$$(15-16) \quad P(\text{Hand-3} | \text{Hand-1}) < P(\sim\text{Hand-3}).$$

Plainly this is bad news for dogmatism. The idea was that I gain justification for Hand-2 from Hand-1, and for Hand-3 from Hand-2.

White notes that justification closure (15-3) is intact. That's because we have:

$$(15-17) \quad [H \Rightarrow H'] \Rightarrow [P(H \& E) \leq P(H' \& E)] \Rightarrow [P(H | E) \leq P(H' | E)].$$

That is, if I am justified in believing Hand-2, I am justified in believing Hand-3. Instead, the culprit is transmission of justification. Let's see how it works.

From Bayes' Theorem we have:

$$(15-18) \quad P(\text{Hand-2} | \text{Hand-1}) = \frac{P(\text{Hand-1} | \text{Hand-2}) P(\text{Hand-2})}{P(\text{Hand-1})}$$

Now we also assume the total probability:

$$(15-19) \quad P(\text{Hand-1}) = P(\text{Hand-1} | \text{Hand-2}) P(\text{Hand-2}) + P(\text{Hand-1} | \sim\text{Hand-2}) P(\sim\text{Hand-2}).$$

Also, from (15-10) we have:

$$(15-20) \quad P(\text{Hand-1} | \sim\text{Hand-3}) \approx 1.$$

Therefore, we can say that $P(\sim\text{Hand-3})$ dominates $P(\text{Hand-1})$: the latter is heavily influenced by the former. Hence, looking again at (15-18) we observe the inverse correlation of the posterior probability of Hand-2 and the prior probability of the sceptical alternative $\sim\text{Hand-3}$. And therefore, still looking at (15-18), in order for the experience Hand-1 to confirm Hand-2:

$$(15-21) \quad P(\text{Hand-2} | \text{Hand-1}) > P(\text{Hand-2})$$

we need the denominator-influencing $P(\sim\text{Hand-3})$ to be low.

In other words, we now see where circularity is. In order for the (II)-proposition to be justified by experience we need first to rule out the sceptical alternative which is what we aim to establish in the (III)-proposition.



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