Joyce on Williamson on Evidence Brian T. Miller October 4, 2017

JJ's account of TW's account of evidence:

- *Status* A proposition e has the status of evidence for a person S just in case S knows e.
- *Relevance* e is (positively) evidentially relevant to h for S just in case the objective evidential probability of h conditional on e and all of S's other evidence exceeds the objective evidential probability of h conditional on S's other evidence alone.

JJ is sympathetic to several features of TW's account of evidence:

- evidence is of central importance in epistemology
- methodologically speaking, TW is on the right track: identify the core features of evidential practice<sup>1</sup> and take evidence to be the stuff that explains those core features
- all evidence is propositional
- in order for e to be part of one's evidence for h, in addition to supporting h it must be possessed. That requires satisfaction of some *epistemic* condition.<sup>2</sup>

JJ's three criticisms of TW (focused on Status rather than Relevance)

- 1. TW assumes evidence-having is categorical/ binary
- 2. evidence = one's *subjective* reasons for their beliefs
- 3. what counts as evidence is context-sensitive

Let's take those criticisms one at a time:

1. TW assumes evidence-having is categorical/ binary

JJ and TW agree that all evidence is *propositional*, disagree on what's required for a proposition to be part of one's evidence.

<sup>1</sup> Actual evidential practice? *Ideal* evidential practice? There are some truly idiotic evidential practices out there...

<sup>2</sup> Keep an eye on this point – it's not clear that JJ's comments are consistent with this concession to TW.

 $E \subseteq K$  p is part of your evidence only if you *know* p

## TW's first argument for $E \subseteq K$ :<sup>3</sup>

Suppose that balls are drawn from a bag, with replacement... I have seen draws 1 to 1000; each was red (produced a red ball). I have not yet seen draw 1001. I reason probabilistically, and form a justified belief that draw 1001 was red too. My belief is in fact true. But I do not know that draw 1001 was red. Consider two false hypotheses:

- *h*: Draws 1-1000 were red, 1001 was black.
- *h*\*: Draw 1 was black, 2-1001 were red

It is natural to say that h is consistent with my evidence and that  $h^*$  is not. In particular, it is consistent with my evidence that draw 1001 was black; it is not consistent with my evidence that draw 1 was black. Thus my evidence does not include the proposition that draw 1001 was red.

In this case I have a JTB that draw 1001 is red, but that's not part of my evidence, so having a JTB in p is not sufficient for p being part of my evidence. What's missing? TW: knowledge.<sup>4</sup>

JJ's first point: this is an inference to the best explanation

Explanandum: the fact that h is consistent with my evidence but  $h^*$  is not

TW's explanans: (i) I *know* that draw 1 was red, but I don't *know* that draw 1001 was red, and (ii)  $E \subseteq K$ , so:

- *draw 1 was red*  $\in$  E, but
- draw 1001 was red  $\notin E$

But alternative explanations are possible. Example: we can distinguish my belief in h from my belief in h<sup>\*</sup> on the basis of differences in their *resiliency* in the face of further evidence:

*resiliency* : a belief that h is *resilient* w.r.t. evidence e to the extent that learning e does not greatly alter the believer's level of confidence in h (298)

Example: if e = *five percent of draws 1001-1100 will be black. draw 1 was red* (based on past observation) is highly resilient to e, *draw 1001 is red* (based on inductive inference) is much less so.

JJ's alternative explanans: (i') *draw 1 was red* is highly resilient w.r.t. e, *draw 1001 is red* is not (ii')  $E \subseteq$  beliefs that are highly resilient to defeating evidence<sup>5</sup>, so

<sup>3</sup> TW's discussion is in §9.6 of KAIL.

<sup>4</sup> NB that this is a version of the lottery paradox, and some will say that you do in fact know that 1001 is red. To stoke that intuition, imagine that the number of draws is really, really huge.

<sup>5</sup> JJ doesn't actually spell out what the members of E have to be highly resilient *to*, and resiliency is relativized to specific propositions. Does that mean that, on an 'E  $\subseteq$  resiliency' account, evidence-having is relativized? Is that acceptable? Is that what JJ means when he talks about the context sensitivity of evidence?

- *draw 1 was red*  $\in$  E, but
- draw 1001 was red  $\notin E$

JJ doesn't take this objection to be decisive. Point seems to be that we need to be really careful before we concede to TW that the difference in knowledge really is the *best* explanation for the data.

**JJ's second point:** TW is making an unwarranted assumption about the nature of evidence-having

Why this matters:

- TW assumes that 'whatever evidence is, it definitively rules out h\* by being inconsistent with it, and definitively permits h by being consistent with it.'
- there's no doubt that *draw 1 was black* is definitively inconsistent with h\* and definitively consistent with h
- but h\* is only *definitively inconsistent with my evidence* if *draw 1 was black* is definitively part of my evidence
- On the Categorial account, it is; on the Graduational account, it isn't

*Categorical account:* On a categorical conception, the question of whether a belief has evidential standing has an unqualified yes/no answer. A person's evidence can be specified as a set of believed propositions, each member of which has the same, univocal status. (298)

- Your total evidence is a set of propositions. Set membership is categorical, so evidence-having is categorical as well.
- Your total evidence *e*<sub>total</sub> is equivalent to the conjunction of all the propositions evidence set.
- Your confidence in h<sup>\*</sup> should be:  $P(h^* | e_{total})$
- Since *draw 1 was red* is a conjunct in *e*<sub>total</sub> and h<sup>\*</sup> ⊢ *draw 1 was* black, *P*(h<sup>\*</sup> | *e*<sub>total</sub>) = 0

*Graduational account:* On a gradational view, one speaks not of evidential status tout court, but of the degree to which a believed proposition counts as evidence. Evidential status falls along a spectrum that ranges from the best sort of evidence, through intermediate grades, to beliefs that are not evidence at all. (299)

- Your total evidence is a set of evidence / probability pairs <e,P(e)>
- High values of P(e) indicate high degrees of 'evidential status'
- There is no single conjunction of propositions equivalent to *e*total
- The only way for h\* to be definitively inconsistent with *e*<sub>total</sub> is for there to be some proposition *with the highest degree of eviden*-*tial status* (something like certainty) that's is itself definitively inconsistent with h\*

Both *draw 1 was red* and *draw 1001 was red* have very high evidential status, but neither has the highest degree of evidential status

So,  $e_{total}^{6}$  is consistent with the negation of both of them; my evidence is consistent with both h and h<sup>\*</sup>.

So what's JJ's Graduationist analogue of Status?

He doesn't have one, but he makes some suggestive comments:

While I have no theory of evidential status to offer, I do claim that, minimally, e's status as evidence improves with the subject's level of confidence in its truth and its resilience in the face of learning experiences that add true beliefs to her evidence. The *best* sort of evidence must be believed with certainty and be completely resilient under the learning of truths. Since known propositions are confidently believed and highly resilient to the truth, they are always evidence of high quality. (299-300)

TW continues his argument that the epistemic condition relevant to evidence possession has to be *knowledge* rather than justification:

If evidence required only justified true belief, or some other good cognitive status short of knowledge, then a critical mass of evidence could set off a kind of chain reaction. Our known evidence justifies belief in various true hypotheses; they would count as evidence too, so this larger evidence set would justify belief in still more true hypotheses, which would in turn count as further evidence. . . . The result would be very different from our present conception of evidence. (201)

# JJ's response:

'Chain reactions' only threaten categorical conceptions of evidence. Gradationalists will simply say that evidential status diminishes as one goes further down the chain of inductive inferences, eventually to vanish completely. The evidential status (and subjective probability) of X & Red<sub>1001</sub> & Red<sub>1002</sub> ... & Red<sub>n</sub>, for example, will slowly decline as n grows until at some ( perhaps vague) point it becomes so unlikely that it ceases to be evidence altogether.<sup>7</sup>

<sup>6</sup> Understood in Graduational terms as including both *draw 1 is red* and *draw* 1001 is red.

<sup>7</sup> This is exactly what we suggested when we discussed TW's book. It's nice to find yourself coming up with the same responses as a philosopher like Joyce! TW's reply to Joyce's Graduationalist objection:

Provocative throw-away comment from TW:<sup>8</sup>

Joyce is claiming [that]... the property of belonging to the total body of evidence that does the supporting comes in degrees... Of course, if knowledge also came in degrees, one could consistently combine the graduational conception of evidence with the equation E=K. (316)

TW's real criticisms:

- JJ agrees that all evidence is propositional, but proposition/ probability pairs aren't propositions: they don't have truth values, can't apply truth-functions to them, etc. More generally, there's no graduationalist account to evaluate and compare to TW's categorical E=K thesis
- JJ's sketch of his graduational account (quoted above) includes 'The *best* sort of evidence must be believed with certainty and be completely resilient under the learning of truths' (300).
  - Intuitively, certainty and refusal to revise my belief that Elvis lives in light of contrary evidence – being super-dogmatic – doesn't confer high evidential status my belief. I might be totally irrational in believing that Elvis lives in the first place and in holding fast in light of the contrary evidence!
  - What's missing in the case of the dogmatic believer? 'The epistemic dimension is exactly what is missing: [the dogmatic believer] does not *know* that Elvis lives.' (TW 318)

BTM: Is that fair? TW is treating JJ's statement as an assertion of a *sufficient* condition for possessing strong evidence, but JJ's comments read more naturally as a statement of a *necessary* condition. In support of that reading, JJ notes approvingly that:

Williamson is one of the few authors who explicitly recognizes that a proposition e's ability to serve as evidence for an hypothesis h depends both on e's relationship to h and on e's own epistemic status. This divides the theory of evidence into what I call a theory of evidential relevance, which seeks to determine whether and how much 'e speaks in favour of h', and a theory of evidential status, which specifies the sort of 'creditable standing' that e must have in order to count as evidence for anything (p. 186). While many epistemologists focus on only part of the job, Williamson addresses both issues.

Clearly, JJ thinks an epistemic condition on evidence possession is warranted. So unless we understand belief, certainty, and resilience <sup>8</sup> Neither JJ nor TW seem to to take this proposal seriously. We'll see if we agree after reading Morrison and Moss. as an epistemic conditions, JJ cannot be reasonably interpreted as asserting a sufficient condition on evidence possession. So TW's broader criticism here seems unfair to JJ: both agree an epistemic condition is needed.<sup>9</sup>

Nonetheless, JJ seems incorrect that an increase in confidence is a necessary condition for an increase in evidential status. What if I'm irrationally confident in p to degree .9, and then I have an experience which raises the evidential status of p from .4 to .8, and as a result I reset my confidence in p to .8. Here we have an increase in the evidential status of p together with a decrease in my confidence in p. So increased confidence isn't a necessary condition for increased evidential status.

end BTM

Now on to JJ's second criticism of TW:

2. evidence = one's *subjective* reasons for their beliefs

Here JJ makes the now-familiar point that we think of evidence/ reasons in at least two senses: factive evidence/ normative reasons/ objective reasons, vs evidence as a rationalizing explanation of an agent's belief/ motivating reasons, subjective reasons.

When TW argues for E=K he misleadingly stresses the factive/ normative/ objective side, ignoring the subjective side.

Lesson: we should allow some evidence propositions to be false, so  $E{\not=}K$ 

BTM: nothing new here we haven't already discussed

3. what counts as evidence is context-sensitive

TW criticizes E=B accounts for making it easy to manufacture evidence for whatever you want to believe: if you want to be rational in believing p, just believe it: that way it becomes part of your evidence (by E=B) and your belief is rational.

In JJ's words:

The claim is that if one's evidence is not composed of truths, then one can satisfy the 'proportioning requirement'<sup>10</sup> by fitting one's evidence to one's beliefs rather than by fitting one's beliefs to one's evidence.

<sup>10</sup> Clifford: "it is wrong, always, everywhere and for anyone to believe anything upon insufficient evidence", i.e. proportion your belief to the evidence (Hume).

<sup>9</sup> Of course, this is the exact opposite of what Schroeder argued last week.

## JJ's response:

I am not convinced that E = B condones such manipulation. An example will make the point. Suppose I desperately want to believe in god, but that I am a Cliffordian who does not believe anything on the basis of insufficient evidence. I now have no evidence for thinking that god exists. In particular, while I recognise that certain commonly reported miracles would be excellent evidence for god's existence, I am sure that no such miracle has occurred. I also know, however, that if I hear a sermon by the persuasive Monsignor Menteur I will come out believing that there have been many such miracles. Suppose, despite my doubts about Menteur's veracity, I attend the sermon so as to bring myself to hold beliefs that, given E = B, will provide me with strong evidence for theism. Williamson is suggesting that E = B condones such an act, but I do not see how it does. The conjunction of E = B with the requirement to proportion my beliefs to my evidence does require me to believe in god once I come to believe in miracles. This, however, is not where my mistake lies: if I believe in miracles then I should believe in god since (ex hypothesi) the latter is the best explanation for the former.<sup>11</sup> My error was in choosing to attend the sermon when I was sure that doing so would lead me to believe falsehoods. Before the sermon my evidence (i.e., what I believe) is that there have been no miracles and that Menteur is a liar. Despite this, I knowingly take a step that will lead me to hold opinions that directly conflict with my evidence. This is where I violate the proportioning requirement; I do not violate it after hearing the sermon. So, while E = B does enjoin us from criticising a person for drawing conclusions on the basis of evidence arrived at via manipulation, it requires us to criticise the manipulation itself.

## TW's response:

Perhaps JJ is right that E=B doesn't require one to condone the act of going to the sermon knowing that it will irrationally sway your beliefs, and hence it may be irrational to go in the first place.

But consider the belief in god based merely on the rhetoric of the sermon. Clearly it's irrational (says TW). But according to E=B it's perfectly rational.

## BTM:

Both TW and JJ seem to be assuming Evidentialism here, the thesis that what it's rational to believe supervenes on the evidence. But there are other options: perhaps the origins of a belief are relevant. If so, then the problematic of JJ's newfound theistic beliefs might render them irrational, in spite of their evidential support.

JJ can say that, but TW can't: he's a time-slice epistemologist, someone who thinks that all the rationality facts about an agent supervene on facts about this particular moment in time. We'll talk more about <sup>11</sup> Assuming E=B, that is!

this when we discuss Hedden's paper. end BTM.