## Notes on Neta's "What Evidence Do You Have?"

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Neta's paper contains a novel (and compelling) approach to answering the question "What Evidence Do You Have?". His approach can be summed-up *via* the following *criterion* for being in "S's evidence set at *t*":

(LIE) p is an element of S's evidence set at t ( $\mathbf{E}_{S}^{t}$ ) iff p is a *proposition* with the following property:

If  $E_S^t$  is a proposition which is such that, for any hypothesis H, S is rationally required to have a degree of confidence in H that is proportional to the degree to which  $E_S^t$  supports H, then p is a member of some decomposition of  $E_S^t$  into conjuncts each of which is such that S is able to use that conjunct in the regulation of her attitudes.

Neta arrives at (LIE) in stages. First, he imposes the following two *desiderata* on any answer to our question:

- 1. It should explain how a subject is able to use particular bits of (her total) evidence in the rational regulation of her own attitudes.
- 2. It should explain the *requirement of total evidence* why it is that, for any *H*, *S*'s confidence in *H* (at *t*) should be proportional to the degree to which *S*'s total evidence (at *t*) supports *H*.

As the paper goes on, we realize that (LIE) is "larcenous" because it doesn't "explain" the explananda of (1) and (2) in any "thick" sense of "explain". But, it *entails* the explananda of (1) and (2), and that (more or less) is how Neta uses (1) and (2) to argue (somewhat indirectly) for (LIE). He considers various existing proposals, and he uses the requirement that an account must entail (and/or appeal to said entailment) the explananda of (1) and (2) to rule-out all of these existing proposals. The paper contains lots of arguments and examples. I won't go through all of these, but I will discuss some of the ones I found most interesting and important.

# 1 Neta on the Propositionality of Evidence

It follows from (LIE) that all elements of  $\mathbf{E}_S^t$  are propositions. So, Neta needs to say something about why he thinks this is the case. As always, Neta argues for this *indirectly*, by appealing to (1) and (2) to *rule-out alternatives*. But, first, he explains why he doesn't think Williamson's arguments for this claim are good.

## 1.1 Neta on Williamson's Three Arguments for Propositionality

Williamson gives three arguments for the propositionality of evidence.

- (I) The argument from the *grammar* of why-questions and answers (*i.e.*, the grammar of "because").
- (II) The argument from inverse probability (viz., likelihood).
- (III) The argument from ability to rule-out hypotheses.

I won't get into the details of Neta's replies to each of these. But, there is a theme in his replies. In the first two cases, Neta asks why entities that are *not* propositions (*e.g.*, objects, events, states of affairs) could not adequately play the roles required of them (in answers to why-questions, or in conditional probabilities). In the third case, he wonders why it couldn't just be *statements about S*'s evidence that do the requisite ruling-out, while *S*'s evidence is itself non-propisitional. As Williamson does not answer these questions, Neta moves on to provide his own argument for propositionality, which makes use of (1) and (2).

# 1.2 Neta's Argument for the Propositionality of Evidence

Neta's strategy here (and later) is to consider various *alternatives* to propositionality, and then rule them out, using (1) and (2). Once he rules-out all the alternatives he can come up with, he takes propositionality to be the best explanation of the failures of the alternatives, which leads him to infer propositionality.

The first alternative to propositionality Neta considers is:

(NP<sub>1</sub>) S's evidence set at time t is the set of all and only those objects with which S is acquainted at t.

To assess  $(NP_1)$ , Neta asks us to consider the following scenario:

A particular knife is bloody. The blood on the knife is — unlike most human blood — of the same unusual chemical composition as the blood of the murder victim. The knife was lying in the kitchen, which is right next to the living room, and that is where the murder victim was found. The knife had the defendant's fingerprints, and nobody else's fingerprints, all over the handle. Furthermore, there is no evidence pointing to the guilt of anyone other than the defendant. Now, if S has enough evidence to know all of the facts just listed (at t), then S's evidence (at t) should make it rational for her to be very confident (at t) that the defendant is guilty. . . . What evidence set could render this [high degree of confidence] rational?

He asks us to consider the set of objects with which S is acquainted at t, which will include the knife, the corpse of the murder victim, the fingerprints, the blood, the room in which the murder victim was found, the room in which the knife was found, and so on. Neta then points out that it couldn't possibly be merely the objects with which S is acquainted at t that accounts for S's high degree of confidence in the defendant's guilt G0 at D1. After all, we can imagine a different scenario in which D2 is acquainted with the very same objects at D3, but her rational degree of confidence in D4 would D4 be high. Note that this does not depend on one's D5 account of "acquaintance" or on D6 many objects are included in the set, D7 much for D8. The next non-propositional proposal Neta considers is:

(NP<sub>2</sub>) S's evidence set at *t* is the set of all and only those property instantiations (*i.e.*, states) and relations with which *S* is acquainted at *t*.

The same sort of argument can be run against (NP<sub>2</sub>). Neta constructs the scenario by supposing that the state of the knife's being bloody is identical to the state of knife's being covered in a fluid that has the chemical composition C, and that S is acquainted with the state of the knife's being covered in a fluid that has the chemical composition C. It follows that S is acquainted with the state of the knife's being bloody. Now, consider two cases: (a) S knows that these states are identical (and hence knows that the knife is bloody), and (b) S has has no reason to suppose said identity. It seems clear that S's rational degree of credence in S could differ between cases (a) and (b), despite the fact that she is acquainted with the very same states in the two cases. We can run the same argument for relations. So much for (NP<sub>2</sub>). Neta then says that propositions seem to be the only S's left that will plausibly be such that:

it impossible for there to be a pair of situations that differ with respect to what I can rationally be confident of, but that are the same with respect to *Z*'s.

The idea here is that (degree of) rational confidence (intuitively) *supervenes* on *propositions* that are contained in one's evidence set. Unless I'm missing something, if that is right, then it seems like a reason not only to think that *some* evidence is propositional, but that *all* evidence is propositional. No? Neta seems to think that the argument only supports the claim that *some* members of *S*'s evidence set are propositions. I don't quite see why this is. In any event, note how the argument uses (2) to rule-out possibilities.

# 1.3 Neta's Arguments Concerning Existing Accounts of Evidence

## 1.3.1 Neta's Arguments Concerning Existing Doxastic Accounts of Evidence

In this section of the paper, Neta gives arguments that are similar to some of Williamson's arguments (one of which we already discussed last week). He also gives a novel argument against Williamson's E = K.

E = B. p is a member of S's evidence set at t if and only if S believes that p at t.

**Counterexample** (Williamson). Suppose S is drawing billiard balls out of an urn one by one. S knows that there have been exactly 99 drawings so far, but S has not been watching the results, so S has no reason to believe anything about what colors the drawn billiard balls have been so far. If S believes, for no good reason at all, that the first drawing produced a black ball, and that the second drawing produced a black ball, and that ... and that the 99th drawing produced a black ball, then, according to E = B, S's evidence set includes all of those 99 propositions, along with the proposition that there have been exactly 99 drawings. Now, if, as E = B predicts, S's evidence does include all of those propositions, and if furthermore S has no evidence against the proposition that the next ball will be black, then S can rationally be quite confident that the next ball will be

black. Nonetheless, it is clear that, in a situation where S has not been looking at the drawn balls, and S has no reason to believe anything about their colors, S cannot rationally be confident that the next ball will be black. Thus, the prediction issued by E = B for the situation envisaged is false. And so E = B is false.

I think this counterexample is compelling. [Note how it makes use of (2) to rule-out E = B.] But, it is worth noting that it is only a counterexample to  $B \subseteq E$ ; it is not a counterexample to  $B \supseteq E$ . Interestingly, Neta thinks his counterexample to E = E (below) allows us to generate a counterexample to  $E \supseteq E$  as well.

E = TB. p is a member of S's evidence set at t if and only if S truly believes that p at t. Counterexample. Same example + the truth of the beliefs about the first 99 balls being black.

Truth doesn't help here. The problem wasn't that the beliefs weren't true. It was that S had no good reason to believe them. Note, again, how this uses (2) to generate a counterexample to  $TB \subseteq E$  [but not to  $TB \supseteq E$ ].

E = JB. p is a member of S's evidence set at t if and only if S justifiably believes that p at t. Counterexample. Same example + S knows that the first 99 balls were black. Neta (and Williamson) seem to think that this leads to a regress, which refutes E = JB. Does it?

This is the example we discussed last week. Note how it *changes significantly* from the above examples. In the above examples, the problem (intuitively) *was* that *S* didn't have any good reason to believe that the first 99 balls had been black. Now, we're asked to suppose that *S does* have good reason to believe these claims. Indeed, we're asked to suppose that *S knows* them. Then, we are just *told* that:

(†) *If S* knows that the first 99 balls were black, *then S is justified in believing that* the next drawing will produce a black ball.

Really? I think I'd be happy to concede the following:

(‡) *If S* knows that the first 99 balls were black, *then* it would be rational for *S* to have a high degree of confidence that the next drawing will produce a black ball.

But, ( $\pm$ ) will lead to no regress, unless we're defending an E = HDC view, according to which E gets to count as evidence for S, so long as it would be rational for S to have a high degree of confidence that E. I think I'm happy to grant the falsity of that thesis. Moreover, it is not uncontroversial to move from it would be rational for S to have a high degree of confidence that E to S is justified in believing that E. In fact, the lottery paradox (and other similar paradoxes) have led many people to reject this inference as invalid. However, I can't see any other way of reconstructing the argument for the claim that this constitutes a counterexample to E = JB. Can you? I won't bother to discuss the E = JTB theory, and his "counterexample" to it, since that one works only if this "counterexample" to E = JB works (and you've heard my doubts about that already). Before moving on to E = K, I want to briefly discuss Neta's side-remark that this example also refutes the E = WC theory, according to which something gets to count as evidence so long as it's "well-confirmed". There are two popular notions of "well confirmed" in the literature. One of them is (something like) "being highly probable" (or "meriting high rational credence"). And, that would seem to involve something like (‡), which supports my hunch that something like E = HDC is really the view that's being refuted here. The other is something like "being strongly supported by some foreground evidence E, against some backdrop of background evidence K". However, it's difficult to make sense of this sense of being "well-confirmed", unless we already have identified a salient collection of background evidence K against which we can assess the relevance (difference-making or supporting power) of some foreground evidence E regarding the proposition in question p. This is very tricky, since it seems we already need a way of individuating and demarcating sets of evidence (in relation to our total evidence?). So, I doubt this is what Neta has in mind here. No matter, since Neta thinks that he has a different sort of counterexample to Williamson's E = K thesis. And, if you're sympathetic to a K = JTB+ theory, then you might be able to convert Neta's counterexample (if it be such) to E = K into an entirely different sort of counterexample to E = JTB. A few more, before E = K.

E = RB. p is a member of S's evidence set at t if and only if S's belief that p is reliably formed. **Counterexample.** Let N be a complicated neurological state which, as a matter of fact (or as a matter of law?), is such that S is in N when and only when S believes that she is in N. Furthermore, let's suppose that S is entirely

unaware of the truth of this (lawlike?) biconditional: S is simply surprised occasionally to find herself believing that she is in N (for no reason?). In that case, S's beliefs that she is in N will be as reliably formed or sustained as any belief could be. But rationality does not require that S distribute her confidence over hypotheses in proportion to the degree of support that those hypotheses receive from her belief that she is in N.

I feel the pull of this example. But, for me, the pull stems from the fact that (as I hear the example) *S* is *not justified in believing that* she is in *N*. If she had some good reason for believing that she was in *N*, then the example would lose its force for me. Does this suggest some *internalist* commitment on Neta's part?

E = BB. p is a member of S's evidence set at t if and only if S blamelessly believes p at t.

**Counterexample.** Through no fault of her own, *S* uncritically believes everything that she hears other people assert, at least when those assertions go uncontradicted by other assertions. She cannot be blamed for doing so, because she is somehow prevented from exercising her critical capacities very well, and indeed, we may suppose that her beliefs end up being right more often when she does not exercise her critical capacities, and she knows this. So she blamelessly imbibes the following beliefs from her fellows: all of the books in the local library are full of lies and corrupt the mind of anyone who reads them, scientific inquiry is a lot of highly funded academic babble with no better epistemic credentials than astrology, and foreigners are all out to kill us. It is, of course, a terrible shame that *S*'s cognitive powers prevent her from effectively examining these beliefs, but that is not *S*'s fault. Clearly, rationality does not require that *S* distribute her confidence across hypotheses in proportion to the degree that those hypotheses are supported by the blamelessly held beliefs just mentioned.

To my ear, the pull of this one can also be explained by a lack of *justification*. She's just not justified in believing these things. After all, she believes *everything* that she hears other people assert. So, *some* of those things are bound to be *unjustified* for her, no? By focusing on (what I take to be) outrageous and unjustified claims, he's drawn my attention to the question of the justification of her beliefs.

E = LCSB. p is a member of S's evidence set at t if and only if p is a member of the largest coherent subset of S's beliefs.

Counterexample (Plantinga). Ric is climbing Guide's Wall, on Storm Point in the Grand Tetons; having just led the difficult next to last pitch, he is seated on a comfortable ledge. ... He believes that Cascade Canyon is down to his left, that the cliffs of Mount Owen are directly in front of him, that there is a hawk gliding in lazy circles 200 feet below him, that he is wearing his new Fire rock shoes, and so on. His beliefs, we may stipulate, are coherent. Now add that Ric is struck by a wayward burst of high-energy cosmic radiation. This induces a cognitive malfunction; his beliefs become fixed, no longer responsive to changes in experience. No matter what his experience, his beliefs remain the same. At the cost of considerable effort his partner gets him down and, in a desperate last-ditch attempt at therapy, takes him to the opera in nearby Jackson, where the New York Metropolitan Opera on tour is performing La Traviata. Ric is appeared to in the same way as everyone else there; he is inundated by wave after wave of golden sound. Sadly enough, the effort at therapy fails; Ric's beliefs remain fixed and wholly unresponsive to his experience; he still believes that he is on the Ric is climbing Guide's Wall, on Storm Point in the Grand Tetons; having just led the difficult next to last pitch, he is seated on a comfortable ledge. ... He believes that Cascade Canyon is down to his left, that the cliffs of Mount Owen are directly in front of him, that there is a hawk gliding in lazy circles 200 feet below him, that he is wearing his new Fire rock shoes, and so on. His beliefs, we may stipulate, are coherent. Now add that Ric is struck by a wayward burst of high-energy cosmic radiation. This induces a cognitive malfunction; his beliefs become fixed, no longer responsive to changes in experience. No matter what his experience, his beliefs remain the same. At the cost of considerable effort his partner gets him down and, in a desperate last-ditch attempt at therapy, takes him to the opera in nearby Jackson, where the New York Metropolitan Opera on tour is performing La Traviata. Ric is appeared to in the same way as everyone else there; he is inundated by wave after wave of golden sound. Sadly enough, the effort at therapy fails; Ric's beliefs remain fixed and wholly unresponsive to his experience; he still believes that he is on the belay ledge at the top of the next to last pitch of Guide's Wall, that Cascade Canyon is down to his left, that there is a hawk sailing in lazy circles 200 feet below him, that he is wearing his new Fire rock shoes, and so on.

## According to Neta,

After he suffers from the cognitive malfunction, and his beliefs are radically disjoint from his experience, rationality does not require that Ric distribute his confidence across hypotheses in proportion to the degree to which those hypotheses are supported by the beliefs in that largest coherent set.

What *does* rationality require of Ric after he suffers from the cognitive malfunction? I don't really like examples involving "rational requirements" on "malfunctioning agents". I don't have clear intuitions about such cases, partly because I'm not sure "rational requirements" *apply* in cases such as these.

E = K. p is a member of S's evidence set at t if and only if S knows that p at t.

**Counterexample.** Imagine two subjects who differ slightly in their phenomenal states. One of them is enjoying a perfectly clear visual image of a 4-speckled hen against an otherwise simple and uniform background, and the other is enjoying an equally clear and otherwise identical visual image of a 5-speckled hen. Suppose furthermore that neither of them believes or knows anything very specific about the number of speckles on the hen image that they're now having, *i.e.*, neither have any beliefs as to whether the number of speckles is four or five, though each (we may suppose) believes that the number of speckles is greater than three and less than seven. The two subjects differ, therefore, both in their phenomenal states, but — let's suppose — not in any other way that is independent of this stipulated differences in their phenomenal states. Now, let's consider two issues: first, should each subject distribute her credences in the very same way over the hypothesis that she has an image of a 4-speckled hen and the hypothesis that she has an image of a 5-speckled? And second, if the two subjects should distribute their credences differently over those two hypotheses, is this difference explicable by appeal to the difference in the propositions that they know to be true?

Neta argues that the answer to both questions is "No", thus yielding a counterexample to E = K. The way Neta is understanding the example, he suggests that the following claims are true:

- Neither the 4-speckle subject nor the 5-speckle subject believes or knows anything very specific about the number of speckles on their hen image.
- The 4-speckle subject should be highly confident that their hen image has 4 speckles (and, hence, not highly confident that it has 5 speckles).
- The 5-speckle subject should be highly confident that their hen image has 5 speckles (and, hence, not highly confident that it has 4 speckles).
- The two subjects are identical in all respects that are independent of the specified phenomenal difference between them.
- The phenomenal difference *itself entails* an *epistemic* difference: Each subject knows *de re*, of each speckle in her image, that *it* (attending to that speckle) is *there* (attending to its position in the image).
- These entailed epistemic differences *cannot explain* the difference in rational confidence requirements between the two subjects.
  - The argument for this last claim seems to involve first ruling-out any difference having to the *number* of (*de re*) of speckle-truths (of the above sort) known by the two subjects, and then wondering what *other* difference could make the requisite difference for rational confidence.
- Thus, we have a counterexample to E = K. Do we seem to have the ingredients for counterexamples to *any* "doxastic supervenience base" for rational confidence distributions? Neta thinks so.

This was a tough argument for me to follow. It's interesting that it involves *perceptual demonstratives*. I take it Neta is committed to conceptual content of perceptual experience (*via* something like Pryor's "premise principle")? More on this, below, in the "non-doxastic accounts" part of the paper.

## 1.4 Neta on Non-Doxastic Accounts of Evidence

 $ND_1$ . p is a member of S's evidence set at t if and only if S has a propositional attitude toward p at t. Counterexample. John wants it to be the case that Kerry wins the election. But rationality does not require that John distribute his confidence across hypotheses in proportion to the degree to which those hypotheses are supported by a conjunction one conjunct of which is the proposition that Kerry wins the election: the proposition that Kerry wins the election should not help to fix John's degrees of confidence. One problem with non-doxastic account 1 is that wanting it to be the case that p does not, by itself, give me any reason to believe that p, or to believe anything that is supported by p.

 $ND_2$ . p is a member of S's evidence set at t if and only if S has a non-motivating propositional attitude toward p at t.

**Counterexample.** In order to construct a *reductio ad absurdum* proof of p, S begins by assuming not-p. Nonetheless, rationality does not require that S distribute her confidence in hypotheses in proportion to the degree to which they are supported by a conjunction, one conjunct of which is not-p: not-p is not a member of S's evidence set, despite S's supposing that not-p. But supposition is a non-motivating propositional attitude, so not all of the propositions towards which S has a non-motivating propositional attitude at t are in S's evidence set at t. The problem with non-doxastic account 2 is that not all non-motivating propositional attitudes provide reasons to believe their propositional contents. We need to restrict the class of relevant propositional attitudes even more in order to arrive at a possibly correct account of evidence.

 $ND_3$ . p is a member of S's evidence set at t if and only if S has a conviction-carrying attitude that has the representational content that p at t. (A 'conviction-carrying' propositional attitude that p is an attitude that either generally involves, or has a tendency to produce, the conviction that p. Thus, motivating propositional attitudes are none of them conviction-carrying, and neither is supposition conviction-carrying, but believing, perceiving, and remembering are all conviction-carrying.)

**Counterexample.** If I believe, for no reason whatever, that the first 99 drawings of a ball from a particular urn have produced black balls, rationality does not thereby require that I am confident that the 100th drawing will produce a black ball. Not all of my beliefs are in my evidence set, and so not all of the propositions towards which I bear conviction-carrying, non-motivating propositional attitudes are in my evidence set. So non-doxastic account 3 provides too generous an account of my evidence.

 $ND_4$ . p is a member of S's evidence set at t if and only if S has a conviction-producing but not conviction involving attitude that has the representational content that p at t.

Counterexample. Suppose you learn about a peculiar psychosis that invariably causes its victims to not believe that they exist. You are a hypochondriac with a tendency to worry that you have every disorder that you learn about, so in this case you attempt to ascertain that you do not have this disorder. This attempt succeeds easily because you have conclusive evidence that you do not suffer from the disorder, namely, that you do believe that you exist. But, while the proposition that you believe that you exist is the content of some of your conviction-carrying attitudes (e.g., you believe that you believe that you exist, you know that you believe that you exist, you understand that you believe that you exist, perhaps you introspect that you believe that you exist) it is not a necessary condition of that proposition being in your evidence set that it be the content of any attitude that is not conviction-involving. Thus, what is obviously a bit of your evidence does not get to count as an element of your evidence set by non-doxastic account 4, and so non-doxastic account 4 is false.

 $ND_5$ . p is a member of S's evidence set at t if and only if S has a perceptual experience or apparent memory that has the representational content that p. (Or, p is a member of S's evidence set at t if and only if p is a true proposition to the effect that, at t, S has a particular perceptual experience or apparent memory.) **Counterexample**. None?

## 1.5 Elaboration of (LIE)

- The correct decomposition of  $E_S^t$  into conjuncts is a decomposition which is such that, for every conjunct in that decomposition, S is able to use that conjunct in the rational regulation of her attitudes. If there is more than one decomposition of  $E_S^t$  that satisfies this second constraint, that may be fine: we may let all of the conjuncts in every such decomposition be elements of S's evidence set: their conjunction will still be  $E_S^t$ , and so will still satisfy our first constraint.
- What is there is no decomposition of  $E_s^t$  into conjuncts that satisfies this second constraint?
  - To see why this is not possible, let's recall that  $E_S^t$  is a proposition such that rationally requires me to distribute my confidence across hypotheses in proportion to the support that those hypotheses receive from  $E_S^t$ . Now, if this is what rationality requires of me, then I must have the ability to comply with this requirement: governments, armies, and social conventions may require me to do all sorts of things that I lack the ability to do, but rationality itself cannot require me to do anything that I lack the ability to do.