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EXPLANATIONIST EVIDENTIALISM

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ABSTRACT

In their most recent co-authored work, Conee and Feldman (2008) suggest that epistemic support should be understood in terms of best explanations. Although this suggestion is plausible, Conee and Feldman admit that they have not provided the necessary details for a complete account of epistemic support. This article offers an explanationist account of epistemic support of the kind that Conee and Feldman suggest. It is argued that this account of epistemic support yields the intuitively correct results in a wide variety of cases. Further, this explanationist account of epistemic support is not susceptible to objections that Lehrer (1974) and Goldman (2011) have raised for similar accounts of epistemic support.

In their most recent collaborative work, Conee and Feldman (2008, 83) offer the following formulation of evidentialism:

E
S is justified in believing *p* at *t* iff S's evidence at *t* on balance supports *p*

Although this formulation is slightly different than the formulation offered in their earlier work, the view expressed is essentially the same.[2] The doxastic attitude that one should adopt toward a proposition at a particular time is solely a matter of the evidence that one has at that time. Despite the fact that Conee and Feldman have done much to motivate evidentialism and defend it from its various critics, there is much work yet to be done to make evidentialism a complete theory of epistemic justification.[3] As Conee and Feldman (2008, 84) note, 'accounts of what evidence is, what it is for a person to have something as evidence, when a body of evidence supports a proposition, and what the basing relation is' are all needed before evidentialism can be considered complete. Here I intend to contribute

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2 Feldman and Conee (1985, 15) describe evidentialism as: 'EJ Doxastic attitude *D* toward proposition *p* is epistemically justified for *S* at *t* if and only if having *D* toward *p* fits the evidence *S* has at *t*'. Two differences between this formulation and their most recent formulation stand out. First, the most recent formulation is in terms of belief instead of doxastic attitudes more generally. However, their later work (Conee and Feldman 2008) makes it clear that E can also be formulated in terms of other doxastic attitudes. Second, EJ speaks of 'fit' with evidence, whereas E speaks of 'support'. This is merely a verbal difference, because the attitude that 'fits' the evidence is the one that is 'supported' by the evidence.

3 For a sampling of their work motivating and defending evidentialism, see Conee and Feldman 1985, 2004, 2008 and 2011.

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to filling out the evidentialist theory of epistemic justification by offering an account of when a body of evidence supports a proposition, i.e. an account of epistemic support.

1. EXPLANATIONISM AND EVIDENTIALISM

1.1 *Best explanation evidentialism*

Conee and Feldman (2008, 97) believe that 'fundamental epistemic principles are principles of best explanation'. They suggest that what is justified for a person is propositions that are part of the best explanation of the person's experiences available to her and the conclusions of inferences that would enhance that explanation. Although they make this suggestion, Conee and Feldman (2008, 98) admit 'there are important details of this account that are yet to be developed.' Here is a first step toward developing these details:

> *Explanation*
> S's evidence, *e*, on balance supports *p* at *t* iff *p* explanatorily coheres with *e* at *t*

Explanation captures the general idea suggested by Conee and Feldman (2008). Of course, it is not very helpful without an explanation of what it means for *p* to 'explanatorily cohere' with S's evidence.

> *Explanatory Coherence*
> *p* explanatorily coheres with *e* at *t* iff *p* is part of the best explanation available to S at *t* for why S has *e*

Combining *Explanation* and *Explanatory Coherence* with Conee and Feldman's E yields:

> *Best Explanation Evidentialism (BEE)*
> A person, S, with evidence *e* at *t* is justified in believing *p* at *t* iff *p* is part of the best explanation available to S at *t* for why S has *e*

BEE seems to be the sort of account that Conee and Feldman have in mind.[4] According to *BEE*, the basic epistemic principle is a principle of best explanation. Although *BEE* and similar accounts of epistemic support might seem attractive, they are problematic. Both Lehrer (1974) and Goldman (2011) have exposed serious problems about this sort of account, which will be briefly considered here.

1.2 *Lehrer and Goldman against BEE*

In making his case against explanationist accounts of epistemic support like *BEE*, Lehrer uses an example that poses a significant problem for *BEE*. Lehrer's example involves using the Pythagorean Theorem to determine that a particular mouse is five feet from a particular owl:

4 Earl Conee (private correspondence) has suggested that he and Feldman in fact only intended to provide a sufficient condition for epistemic support when they discuss best explanations, so it is likely that they would not want to commit themselves to *BEE*. However, *BEE* seems to at least fit with their claim that 'fundamental epistemic principles are principles of best explanation'.

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> Imagine that I am standing with my toe next to a mouse that is three feet from a four-foot-high flagpole with an owl sitting on top. From this information concerning boundary conditions and the Pythagorean Theorem, which we here construe as an empirical law, we can deduce that the mouse is five feet from the owl (1974, 166).

Lehrer claims that this case is problematic for explanationist accounts of justification because he is 'completely justified in his belief that the mouse is five feet from the owl', but he 'has no explanation of why the mouse is five feet from the owl' (1974, 178). According to Lehrer, the justification of his belief does not depend on 'explanatory relations' at all. Rather, 'it is enough that the man knows the Pythagorean Theorem, the distance to the pole, and the height of the pole, and deduces the conclusion' (1974, 178). Assuming that relations of logical entailment are not themselves explanatory relations, it seems that Lehrer has exposed a flaw in accounts of epistemic support such as *BEE*.[5] Goldman presents a similar example involving a simple inference of arithmetic:

> I think there are two squirrels on my deck, and I think there are two birds. So I infer that there are (at least) four animals. Presumably, this arithmetic inference is justified. Is it a case of explanatory inference? Surely not. How does there being four animals *explain* there being two squirrels and two birds? It doesn't. Still, here is a justified belief that some epistemic principle must cover. But that principle, in turn, cannot be grounded in terms of best explanation (2011, 277–8).[6]

Goldman claims that it is clear that in his case he has justification, but explanationist accounts of epistemic support such as *BEE* cannot account for this justification. So long as entailment relations are not explanatory, Goldman's example presents a problem for *BEE* similar to that posed by Lehrer's example. In Goldman's example, <there are (at least) four animals> is a logical consequence of his evidence that there are two squirrels and two birds on his deck. However, it seems that there being four animals on the deck does not explain there being two squirrels and two birds on the deck. Thus, it again seems that there is a proposition which is justified for someone, but the proposition is not itself part of the best explanation of the person's evidence. *BEE* fails.

2. REVISING *BEE*

2.1 *Explanationist Evidentialism*

Lehrer's and Goldman's examples show that *BEE* cannot be the correct account of epistemic support because it is too restrictive. An adequate account must allow for more than simply an appeal to best explanations; it must also allow for logical consequence. Hence, rather than construing epistemic support as *BEE*, it should be construed as:

5 I will not take a stand on the issue of whether entailment relations are explanatory. See Harman (1973) for considerations in support of the claim that entailment relations are explanatory relations and Salmon (1989) for considerations against the claim.

6 This example is very similar to Lehrer's example of the mouse being five feet from the owl discussed above. However, since the examples are slightly different, it is worth briefly discussing both examples.

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Explanationist Evidentialism (EE):
A person, S, with evidence *e* at *t* is justified in believing *p* at *t* iff either *p* is part of the best explanation available to S at *t* for why S has *e* or *p* is available to S as a logical consequence of the best explanation available to S at *t* for why S has *e*

If, as seems quite plausible, relations of logical consequence are not explanatory, then despite the fact that *EE* is in the spirit of what Conee and Feldman suggest, it is in tension with the claim that all fundamental epistemic principles are principles of best explanation. However, given the difficulties noted above, it seems that construing all fundamental epistemic principles as principles of best explanation may be too restrictive to be accurate. Further, consideration of *EE* will show that it is a much more plausible account of epistemic support than *BEE*.

Before the merits of *EE* can be assessed, it is necessary to clarify three points. First, in order for *p* to be part of the 'best' explanation available to S at *t*, it must be the case that there is no rival (contrary) explanation with respect to *p* available to S at *t* that is as good of an explanation as, or better than, the best explanation of which *p* is a part. It is important to recognize that this does not require S to have a unique best explanation available to her. To see this, consider the following case: S has two explanations available to her, E_1 and E_2, both of which are equally good explanations of why S has the evidence that she does. In this case, S is justified in believing *p* just in case *p* is part of both E_1 and E_2. If *p* is not part of one of these explanations, then *p* is not part of the best explanation available to S, because there is an equally good explanation available to her that does not have *p* as a part. So S can be justified in believing *p*, even though there is not a unique best explanation available to her. What matters is that there are no explanations available to S that do not contain *p* and are as good as the best explanation she has available. Whether one explanation is better than another depends on which explanation is more explanatorily virtuous. The virtuousness of an explanation will depend on a variety of factors, including its explanatory power, simplicity and scope.[7]

Now one might think that a further restriction is in order here, because there can be cases in which the best available explanation is a pretty poor explanation. If *p* is part of the best available explanation, but that explanation is not a good explanation, one might think that *p* is not justified. This is correct, if by 'justified' one means 'strongly justified' or 'justified to the extent required for knowledge'. However, 'justified' in *EE* should be understood to simply mean that S has propositional justification that favors *p* over $\sim p$. This justification can be very minimal. In fact, in cases in which *p* is part of the best explanation available to S at *t* for why S has *e*, and that best explanation is not a good explanation, the justification that S has for *p* is very minimal – it may be barely more than the justification she has for believing $\sim p$. Recognition of the fact that the best explanation might not be a good explanation does not reveal that *EE* requires a further restriction, but it does bring to light a very important feature of *EE*. Since one can be more or less justified in believing a proposition, any plausible account of epistemic support must

7 For discussion of explanatory virtues, see Quine and Ullian (1978), Thagard (1978), Lycan (1988), Vogel (1990), Lipton (2004) and Beebe (2009). There is controversy concerning the correct account of the nature of explanation. For the purposes of this article, the complexities of the correct account of explanation are not relevant. All that matters for the task at hand is an intuitive understanding of explanation and the notion that one explanation can be better than another.

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accommodate this fact. *EE* does. The quality of the best available explanation determines how much justification S has for *p*. *P* must be part of the best available explanation to be justified at all, but the better the explanation that *p* is a part of, the more justified *p* is for S.

Secondly, *e* should be understood to mean S's total evidence. This is important to keep in mind, because construing *EE* in terms of a proper subset of S's evidence would have the obvious flaw of ignoring the potential justificatory impact of defeaters. For simplicity, the examples below only focus on a portion of one's evidence. However, it is assumed in the examples that S's total evidence lacks defeaters that are relevant to the proposition being discussed.

Thirdly, it is important to say what it means for an explanation of why S has *e* to be 'available' to S at *t* and what it means for a proposition to be 'available' to S as a logical consequence of the best explanation available to S at *t* for why S has *e*. First, at *t* S has *p* available as part of an explanation for why S has *e* iff:

> At *t*, S has the concepts required to understand *p* and S is disposed to have a seeming that *p* is part of the best answer to the question 'why does S have *e*?' on the basis of reflection alone.

'Seeming' should be understood here in the sense that Tucker (forthcoming) terms the 'Experience View'. According to this view, seemings are mental states with propositional content and a particular phenomenology – they 'have the feel of truth, the feel of a state whose content reveals how things really are'.[8] Additionally, according to the Experience View, seemings are not themselves beliefs or inclinations to believe.[9] Rather, they are either *sui generis* propositional attitudes or experiences. Of course, this leaves open whether *p* is *in fact* part of the best answer to the question 'why does S have *e*?' It is plausible that S could have a mental state in which it *seems* to her that *p* is part of the best answer to the question 'why does S have *e*?', but in fact it is not. This is important, because S does not need to have infallible access to *p*'s role in answering this question in order for an explanation to be available. Another point that is worth taking into account is that S does not have to have well-developed concepts of 'evidence' or 'explanation' in order to satisfy the requirements of having an explanation available. All that is required is for S to have the disposition to have a seeming that the truth of *p* is part of the best answer to the explanatory question 'why does S have *e*?'; that is, 'why does S have the evidence that she has?' This explanatory question can be construed in a variety of ways. For example, in an ordinary case, in which S has a visual experience as of a red block, it is plausible that S has the disposition (on the basis of reflection alone) to have a seeming that the truth of <there is a red block> is part of the best answer to the question 'why am I having this visual experience?' This does not require S to have any concept of 'evidence' or 'explanation' beyond understanding when something is an answer to a why-question. All S really needs is the ability to understand the question 'why do I have *this*?' (where 'this' refers demonstratively to her evidence) and the ability to understand when something is the best answer to this question. Finally, it is important to note that in many cases, S is likely to only recognize a single answer to the relevant explanatory

8 Tollhurst 1998, 298–99. See Pryor 2000, Huemer 2001 and Tucker 2010 for similar descriptions of the phenomenal character of seemings.

9 See Bealer 2000, Huemer 2007, Cullison 2010 and McCain 2012 for reasons to think that seemings are not beliefs or inclinations to believe.

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question. In these cases, the answer to this question is the best by default – it is the only available answer.

Secondly, *p* is available to S as a logical consequence of the best explanation available to S at *t* for why S has *e* iff:

> S has the concepts required to understand *p* and S is disposed (on the basis of reflection alone) to have a seeming that *p* is entailed by the best explanation available to S at *t* for why S has *e*

It is worth mentioning that this availability condition does not require S to have well-developed concepts of 'logical consequence', 'entailment' or similar concepts. To illustrate this, consider a situation in which S has evidence that justifies the beliefs that *p* and that *if p, then q*. According to *EE*, S's evidence (assuming she has no defeaters) supports *q* so long as (1) S has the concepts required to understand *q* and (2) she is disposed to have a seeming that *q* is a logical consequence of the best available explanation of her evidence. It is plausible that S does not need the concept of 'logical consequence' or 'entailment' in order to have a seeming that *q* is a logical consequence of the best available explanation of her evidence; she simply has the seeming that *q* follows from the best available explanation of her evidence in the sense that someone who does not have the concept of *modus ponens* can have the seeming that if *p* and *if p, then q* are true, then *q* must be true.[10]

Finally, it is worth noting that although *EE* is similar to explanationist accounts of justification put forward by others, such as Harman (1986) and Lycan (1988), which claim that explanatory coherence among one's beliefs is what justifies those beliefs, it is different in at least one very important respect. Both Harman and Lycan restrict one's evidence to beliefs, but *EE* makes no restriction. Restricting evidence to beliefs is problematic because it opens the door for the 'Input Objection' that Laurence BonJour (1985) described for coherentism. Essentially, the problem is that if evidence is restricted to beliefs, then it is possible for there to be cases in which S has justification for her beliefs (including beliefs about the external world) because of their explanatory coherence with one another, but in which she is completely cut off from experiencing the world around her. This is counter-intuitive. Thus, restricting evidence to beliefs is a mistake; experiential states are evidence too.[11]

EE perhaps even more closely resembles the explanationist account of epistemic support put forward by Moser (1989). Moser's account also appeals to explanatory considerations to spell out epistemic support and avoids restricting evidence to beliefs. What is more, it avoids the problems facing *BEE* by allowing entailment to be part of the account of epistemic support. Despite these similarities with *EE*, the views are different in important ways. First, Moser's account is only in terms of occurrent mental states. That is,

10 Perhaps one will think that in order to have a seeming that a given proposition entails another proposition, one must have at least some understanding of what an entailment is, or at least grasp the concept of entailment or logical consequence or something similar. It is not clear that this is so. However, *EE* is not wedded to any particular view on this matter. For the present purposes, it can simply be noted that the minimal conceptual apparatus needed for having a seeming that *p* is an entailment of the best explanation is all that is required for *EE*. Whether this includes concepts of entailment or particular entailment relations will not greatly affect the plausibility of *EE*.

11 In fact, I think that Conee and Feldman's (2008, 87–8) claim that 'beliefs are only derivatively evidence' because 'all ultimate evidence is experiential' is correct, though I will not argue for it here.

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Moser provides an account of when one has occurrent justification for propositions that are being considered at the time. *EE*, however, can be applied more generally to both occurrent and dispositional mental states.[12]

Secondly, Moser's account differs from *EE* when it comes to justification for entailments. According to Moser, S can have justification for believing an entailment, q, so long as (absent defeaters): (1) S is currently aware of p, (2) p is justified for S, (3) S understands q and (4) p entails q. Moser requires no awareness or apparent awareness of p's entailing q in order to have justification for believing q (propositional justification). Rather, it is simply required that p entails q. Moser only requires awareness of the entailment relation when it comes to justifiedly believing q (doxastic justification). In order to have doxastic justification for q, Moser claims that S must have *de re* awareness of the fact that p entails q. It seems that Moser's account makes propositional justification too easy and doxastic justification too hard. Consider an example of Feldman and Conee's (2001, 4):

> A logic Teaching Assistant and a beginning logic student are looking over a homework assignment. One question displays a sentence that they both know to express a truth and asks whether certain other sentences are true as well. The TA can easily tell through simple reflection that some of the other sentences are logical consequences of the original sentence and thus she is justified in believing that they are true as well. The student is clueless.

We can add to this example by filling in a few details: both the TA and the student are aware of the first sentence, they both have justification for accepting this sentence (they know it!) and they both understand the sentences that are logical consequences of the first sentence. Since the first sentence entails these further sentences, on Moser's account both have propositional justification for believing these further sentences. But this is implausible. After all, we are told, 'the student is clueless'. The problem is that Moser's account does not require any sort of awareness/recognition of the entailment relations that hold between the sentences in order to have propositional justification.[13] *EE* does not share this problem. According to *EE*, the student lacks justification for these further sentences because they are not available to her in the relevant way.

By requiring *de re* awareness of the entailment relation, Moser avoids the previously mentioned problem when it comes to doxastic justification, but he does so at the cost of making doxastic justification too difficult to come by. Given Moser's account, S cannot be justified in believing q unless it is actually entailed by p. This seems too strong. Further, when q is entailed by p it is not clear that S needs something as strong as *de re* awareness of the entailment relation that holds between p and q in order to be justified in believing q. Plausibly, S only needs a weaker sort of awareness, like the seeming that *EE* requires. So, despite many similarities, *EE* is importantly different from Moser's account of epistemic support.

12 Perhaps Moser's account can be extended to cover justification more generally, but it is presented here simply in terms of occurrent justification.

13 Matheson (2009) makes a similar point when he uses Feldman and Conee's example to argue that one needs 'linking information' concerning the entailment relations in order to have propositional justification.

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2.2 *Applying EE*

In order to show that *EE* is an acceptable account of epistemic support, it will be instructive to begin by considering some cases in which it is intuitive that the agent has epistemic support for a proposition and see whether *EE* yields that result.

Let us begin with a simple case of perceptual experience. Intuitively, in normal circumstances (assuming S has no defeaters) S's visual experience as of a red block provides her with epistemic support for the proposition <there is a red block>. *EE* delivers this result. The proposition <there is a red block> is part of the best explanation of why S has an experience as of a red block that is available to S. Recall that in order for this proposition to be available to S, all that is required is for S to have the concepts required to understand <there is a red block> and for S to be disposed to have a seeming that <there is a red block> is part of the best answer to the explanatory why-question 'why does S have *e*?' on the basis of reflection alone. In this case, the relevant why-question can be expressed as: 'why am I having this visual experience?' or demonstratively as 'why am I having *this*?' It is plausible that even children and unreflective adults can have the disposition to have a seeming that <there is a red block> is part of the best answer to the question 'why am I having *this*?'[14] Thus, it is plausible that an ordinary person will have <there is a red block> available as part of the best explanation of her current evidence in this case. Further, it is exceedingly plausible that in a normal case there will not be an equally good or better explanation (which does not include <there is a red block>) available to this person. Therefore, an ordinary person in this sort of case can have justification for <there is a red block> when she has a visual experience of a red block. Other cases of perception will come out similarly – *EE* will deliver the intuitively correct result.[15]

EE also delivers the intuitively correct result in cases of *a priori* justification. If S understands the proposition <every blue book is a book>, it is plausible that S has *a priori* justification for believing that proposition. When S reflects on this proposition and understands its content, she has some sort of experience. One plausible account of the sort of experience that S has when reflecting on this proposition is that she has some sort of awareness of the proposition and of the relations among the conceptual components of the proposition.[16] Given this account, *EE* can explain the epistemic support that S has for the proposition <every blue book is a book> by noting that the truth of this proposition is part of the best explanation of her evidence. In this sort of case, S's evidence includes her awareness (or her apparent awareness) of the proposition <every blue book is a book> and of the apparent fact that the predicate of this proposition is contained in the subject. Even if the awareness that S has of this proposition and the relationship among its components is not factive, it is plausible that the truth of the proposition is

14 It may be that children and unreflective adults will only have one explanation (the one that includes <there is a red block>) available to them. In such a case, they will have a disposition to have a seeming that <there is a red block> is part of the best explanation because they will have a disposition to have the seeming that <there is a red block> is part of *the* explanation for their experience.

15 One might worry whether these external world propositions really are part of the best explanation of S's evidence because of concerns related to external world skepticism. There are good reasons for thinking that these external world propositions are better explanations than their skeptical rivals, but detailing these reasons is outside the scope of this article. The interested reader is encouraged to see Vogel 1990, 2005 and 2008.

16 See Conee (1998) for an explanation and defense of this view. See Markie (forthcoming) for criticism.

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part of the best available explanation for why S has this evidence.[17] So, according to *EE*, S's evidence supports her believing <every blue book is a book>.

A case of inductive inference is also worth looking at. When S is aware that all observed emeralds are green, intuitively, she is in a position to be justified in believing that the next observed emerald will be green.[18] *EE* yields this result. It is plausible that in a case in which S has only observed green emeralds, part of the best available explanation of S's observations is that all emeralds are green. It is also plausible that in this sort of case S has the seeming (or is disposed on the basis of reflection alone to have the seeming) that the explanation containing <all emeralds are green> logically entails <the next observed emerald will be green>. Provided that S is so disposed, and that she understands the proposition <the next observed emerald will be green>, *EE* yields that she has justification for believing <the next observed emerald will be green>. Thus, *EE* yields the intuitively correct result in this sort of case.

Another kind of inductive case concerns the justification that one has when most, but not all, observed A's have been B. In cases where S has made a large and sufficiently diverse sampling of the A's – and a sufficiently large portion of the observed A's have been B – it is plausible that S is justified in believing <the next observed A will be B>. In this case, however, <all A's are B> will not be part of the best available explanation of S's evidence. Rather, something like <most A's are B> will be part of the best available explanation of S's evidence. This, of course, does not entail <the next observed A will be B>. However, one might think that S is justified in believing that the next A she observes will be B, because most of the A's she has observed have been B. Thus, one might worry that *EE* will not be able to properly account for the justification that we have in this sort of case because it cannot do so in the way that it does for cases in which all observed A's have been B.

Fortunately, there are at least two plausible ways for *EE* to handle this sort of case. First, as mentioned above, it is plausible that in this sort of case, <most observed A's are B> is part of the best available explanation of S's evidence. It is not unreasonable to think that the best available explanation of S's evidence in this case entails that the next A will probably (more likely than not) be B. So, *EE* yields the result that S is justified in believing that the next observed A will probably be B. One might argue that being justified in believing that the next observed A will probably be B *just is* to be justified in

17 It is plausible that we are fallible in our assessments of *a priori* matters. Therefore it is plausible that the sort of awareness that we have for propositions that we can have *a priori* justification for believing is not factive. One might worry about how a necessary truth like <every blue book is a book> can explain any feature of one's evidence. While it is true that necessary truths cannot offer much by way of *causal* explanations, explanation should not be restricted to causal explanations when it comes to *EE*. The relevant notion of explanation for *EE* is simply providing an answer to a why-question. It is plausible that part of the best answer to the question of why it seems that the predicate term of <every blue book is a book> is contained in the subject term when one grasps this proposition is that one really does grasp the proposition and that these terms are related in this way, i.e. that <every blue book is a book> is a necessary truth. See Vogel 1990, 2005 and 2008 for further considerations for thinking that particular necessary truths are important parts of the best explanations of various features of our evidence.

18 I am assuming that S has reason to think there will be more emeralds observed in addition to those that have been observed so far. If she has no reason to think this, it is still plausible that she has inductive evidence for the proposition <if another emerald is observed, it will be green>.

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thinking that the next observed A will be B.[19] The reason for this is that one might agree with Feldman and Conee (1985, 34 fn32) that 'evidence which makes believing *p* justified is evidence on which it is *epistemically probable* that *p* is true'. As they note elsewhere, 'what is epistemically justified is 'likely'. This is what is commonly meant by 'likely' and 'probable'' (Conee and Feldman 2011, 297). If one accepts a position like Feldman and Conee's, the fact that *EE* yields that one is justified in believing that the next A will probably be B means that *EE* yields that one is justified in believing that the next A will be B. Of course, one might disagree with this equating of epistemic justification and epistemic likelihood, and thus claim that *EE* does not yield that one is justified in believing that the next observed A will be B in this case. However, one might argue that this is exactly the right consequence in this case. That is, one might think that in this case, S should not believe that the next A will be B, but rather, she should only believe that it will probably be B.

There is a second way for *EE* to handle this sort of case. It is plausible that in this case there is some reason why observed A's are normally B. Since this is what normally happens, when an observed A is not B, something must interfere with the normal course of events. So, one may reasonably argue that in this sort of case, part of the best available explanation of S's evidence is <in all normal cases A's are B>. Additionally, it is not implausible to think that the default position is that any given situation is a normal situation. That is to say, it is not unreasonable to think that one should believe that a situation is normal unless there are reasons for thinking otherwise. Since in the case described it does not seem that S would have reasons for thinking that her situation is abnormal in some way, she should think that she is currently in a normal situation. So, it is plausible that part of the best explanation of S's evidence is <this is a normal case>.[20] The propositions <in all normal cases A's are B> and <this is a normal case> entail <the next A observed in this case will be B>. Thus, *EE* can yield the result that S is justified in believing that the next observed A will be a B in a case where most, but not all, observed A's have been B.[21]

A final sort of case concerns introspection. As Goldman (2011) notes, it is plausible that one can have justification for believing that she has a tickle sensation when she does. However, one might doubt, as Goldman does, that explanationist accounts of epistemic support like *EE* can make sense of the justification one has for this tickle belief. According to Goldman, 'the viability of this approach [explanationist accounts of epistemic support] depends, however, on there being introspective experiences of mental events or states of affairs distinct from the mental states that are allegedly introspected' (2011, 277). Goldman claims 'I doubt there is any "intermediate" mental event that stands between the "objective" state of affairs in question (here, the tickle sensation) and the belief in this state of affairs' (2011, 277). Goldman maintains that in this sort of case there is nothing 'that can function in the guise of a suitable explanandum', so there is nothing for S's introspective belief that she is having a tickle experience to explain (2011, 277). In Goldman's case S has justification for believing the proposition <S has

19 Especially when 'justified' is understood in the minimal sense mentioned above, where S is justified in believing *p* when S's evidence more strongly supports *p* than it does ~*p*.

20 'This' refers here to the situation in which S observes the next A.

21 This way of handling inductive inferences is suggested by Lycan's (1988) explanationist account of statistical inference.

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a tickle sensation>, but he maintains that <S has a tickle sensation> is not part of the best explanation for why S has the evidence she does (her tickle sensation).

Although Goldman's example (and introspection in general) may at first seem to be a problem for *EE*, further reflection reveals that it is not. A supporter of *EE* should reject Goldman's claim that there is no intermediate mental state between the tickle sensation and the belief. After all, it seems that the mental state of S's attending to her tickle sensation is distinct from both the tickle sensation itself and the belief that S has a tickle sensation. To see this, consider a case in which S has a tickle sensation that 'recedes' from her consciousness. That is, at t_1 S has a tickle sensation that she attends to, but at t_2 S is distracted by a loud noise and fails to notice her tickle sensation. Later, at t_3, S attends to the tickle sensation again. In this sort of case it is plausible that S has the tickle sensation (and the belief that she has the tickle sensation) throughout, but she only has the intermediate state of attending to the tickle sensation at t_1 and t_3.[22] Further support for thinking that there is such an intermediate state comes from anti-luminosity considerations. If one's mental states can fail to be luminous, in the sense that one may be unable to distinguish one kind of mental state from another, it is not unreasonable to think that there is some intermediate mental state between the state of affairs (the tickle sensation) and the belief about the tickle sensation.[23] Given the plausibility of there being such an intermediate mental state, it is not unreasonable for the supporter of *EE* to claim that in the cases where S has justification for believing that she is having a tickle sensation, <S has a tickle sensation> will be part of the best available explanation of her having this intermediate mental state.

Now that *EE* has been described and how it works in a variety of cases explained, it is worth considering how it avoids the pitfalls of *BEE* exposed by Lehrer's and Goldman's original examples.

2.3 *EE and the problems for BEE*

Recall Lehrer's example from above, which uses the Pythagorean Theorem to determine that a particular mouse is five feet from a particular owl. Lehrer's example illustrates that one can be 'completely justified in his belief that the mouse is five feet from the owl' while having 'no explanation of why the mouse is five feet from the owl' (1974, 178). The problem for *BEE* is that it seems Lehrer's justification does not depend on explanatory relations. Rather, as Lehrer says, 'it is enough that the man knows the Pythagorean Theorem, the distance to the pole, and the height of the pole, and deduces the conclusion' (1974, 178). So, *BEE* seems to yield the result that Lehrer is not justified in believing that the mouse is five feet from the owl, but clearly he is justified.

22 This example is based on an example that Fumerton (2005) uses to illustrate the relation of direct acquaintance. He discusses a case in which one is directly acquainted with a pain, later fails to notice the pain for a period of time, and comes to be directly acquainted with the pain again at a still later time. Supporters of *EE* may claim that the relevant intermediate mental state in cases of introspective justification is a state of direct acquaintance, or they may claim that it is some other mental state. The important point is that as Fumerton (2005, 125) argues, for any experience E, three things should be distinguished: '(1) E, (2) one's awareness of E and its various characteristics, and (3) one's belief about the various characteristics exemplified by E'.

23 See Williamson (2000) for arguments against the luminosity of mental states.

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Presumably, in Lehrer's case he has evidence that justifies his believing that the mouse is three feet from the flagpole, that the owl is on top of the four-foot tall flagpole and that the Pythagorean Theorem is true – as well as various other bits of relevant information (what three squared equals, what four squared equals, etc.). In terms of *EE*, this means that the following propositions would all be available to Lehrer as part of the best explanation of his current evidence: <the mouse is three feet from the flagpole>, <the owl is on top of the four-foot tall flagpole>, <the Pythagorean Theorem is true>, <the Pythagorean Theorem says that the hypotenuse of a triangle that has a three-foot long side and a four-foot long side is five feet long>, etc. Since these propositions are part of the best explanation available to Lehrer, <the mouse is five feet from the owl> is a logical consequence of this explanation. It is exceedingly plausible that <the mouse is five feet from the owl> is available to Lehrer as a logical consequence of the best explanation available to him at *t* for why he has the evidence that he does. After all, Lehrer says that he deduces this conclusion. So, *EE* yields the result that Lehrer is justified in believing that the mouse is five feet from the owl in this case.

Now consider Goldman's example, which involves an inference of simple arithmetic. In this case Goldman looks out at his deck and sees two squirrels and two birds. On the basis of his visual experience, he infers that there are (at least) four animals on his deck. The problem for *BEE* that Goldman exposes is that although this inference is justified, it does not seem that <there are four animals on the deck> is part of the best explanation of Goldman's evidence. As he says, 'How does there being four animals *explain* there being two squirrels and two birds? It doesn't' (2011, 277). Again, this is a serious problem for *BEE*, but no problem at all for *EE*. Part of the best explanation available to Goldman for his total evidence (both his current visual experiences and his background evidence) in this case is <there are two squirrels on the deck>, <there are two birds on the deck> and <squirrels and birds are both animals>. Given this fact and the highly plausible assumption that Goldman has the concepts required to understand <there are four animals on the deck> and he is disposed (on the basis of reflection alone) to have a seeming that <there are four animals on the deck> is entailed by the best explanation available to him at *t* for why he has the evidence he does, *EE* again yields the correct result that Goldman has justification for believing <there are four animals on the deck>. Neither of the cases that made problems for *BEE* poses a challenge for *EE*.

With the superiority of *EE* to *BEE* established, it will now be useful to consider some further purportedly problematic cases as well as potential objections.

3. OBJECTIONS

3.1 Purportedly problematic cases

Before considering specific objections that one might have to *EE*, it is worthwhile to briefly consider two further cases that are thought to be problematic for explanationist accounts of epistemic support. These cases, like the previous ones, come from Lehrer (1974) and Goldman (2011). First, consider Lehrer's case:

> Suppose I see a dead man before me. If asked whether this man was once sexually conceived, I would, without hesitation, affirm that he was. Furthermore, I would be completely justified in

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> my belief because all who die were once conceived. Death, however, does not explain conception any more than conception explains death. It is simply an observed truth that men come to exist by being conceived, and those who are dead once came to exist. . .I am completely justified in believing that any man, dead or alive, that I see before me, was once conceived. I may not be able to explain his conception any better than I can explain his death, but from the latter unexplained fact, I am completely justified in my belief of the former (1974, 178).

It is unclear how exactly this case is supposed to pose a problem for any explanationist account of justification, even the flawed *BEE*. In this case Lehrer sees a dead man, and that – along with his evidence about how men come to exist and how those who died came to exist – gives him justification for believing that the man was sexually conceived. It seems reasonable to think that the proposition <the man was sexually conceived> is part of the best explanation of Lehrer's evidence (his perceptual experience of the dead man's body and his background evidence about how men are conceived), in which case this example poses no problem for explanationist accounts of justification in general or for *EE* in particular.

The final example from Goldman requires careful consideration in order to see why it fails to pose a problem for explanationist accounts of epistemic support. Goldman's case concerns preservative memory. He states, 'If S was justified in believing P earlier, and S retains her belief in P now via preservative memory, then S is prima facie justified in believing P now' (2011, 277). Goldman goes on to claim, 'like introspection, however, preservative memory lacks any type of mental experience or episode that invites explanation' (2011, 277). So, Goldman thinks he has illuminated a case that explanationist accounts of epistemic support, particularly those like *BEE*, are not equipped to handle. However, even accounts like *BEE* are not troubled by this example and, of course, superior accounts such as *EE* are not either.[24]

In their reply to Goldman, Conee and Feldman (2011) offer a plausible response to this sort of example as a challenge to how S can have any evidence in support of such beliefs. They note that in cases of preservative memory by stipulation, S has not forgotten the preservatively remembered proposition. Since this is so, they claim that S 'has the potential to bring Q to mind with the phenomenology of activating a memory, specifically, the memory that Q' (2011, 304). They go on to point out that S's ability to bring Q to mind in this way is not 'merely because he has the stored belief that Q. Many of our stored beliefs are recalled as things we merely believe, not as things we know' (2011, 304). Conee and Feldman label this potential to bring a proposition to mind in this way in cases of preservative memory a 'disposition to recollect', which they explain 'is a disposition to bring to mind the proposition as known' (2011, 304). They conclude that 'there is something about his mental states at the time that provides justification for this stored belief, but the justifying is not done by any active conscious occurrence at that time. Evidentialism need not appeal only to conscious occurrences to justify stored beliefs' (2011, 304). So, it is plausible that S has dispositional evidence in Goldman's example. It is also plausible that the evidence that S has in this example supports her belief in the remembered

24 In Goldman's defense, he does present this example along with the two others discussed above, while noting that all he needs to make his point is for one of the three to be a legitimate counterexample. In this respect it seems that Goldman is successful, because his earlier example illuminates a serious problem for *BEE* and similar accounts of epistemic support.

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proposition. Since in a case of preservative memory S has a disposition to recall the proposition remembered 'with the phenomenology of activating a memory', it is plausible that S also has a disposition to have a seeming that the truth of the proposition is part of the best explanation of why he recalls the proposition with that particular phenomenology (2011, 304). So according to *EE*, these dispositions are sufficient for S to have justification for believing the proposition that is retained in preservative memory, so *EE* yields the intuitively correct result in cases of preservative memory. It is quite plausible that *BEE* can appeal to these sorts of dispositions to handle this sort of case as well.

3.2 *Further objections*

The first of the remaining objections is another from Lehrer (1974). He claims:

> We have no reason to believe that there is *one* best system from the standpoint of explanation. There are always conflicting theories concerning some aspect of explanation. Hence, if it is required that there be a best...we shall never be completely justified (1974, 181).

Of course, if Lehrer is correct in claiming that there is never a best explanation because there are always equally good competitors, then *EE*, and explanationist accounts in general, are in deep trouble.[25] Fortunately, there is a good response to this objection. First of all, *EE*, and any halfway plausible explanationist account of justification, is restricted to the best *available* explanation. So long as the other explanations that Lehrer is appealing to are not available to S, they do not stop her evidence from providing epistemic support for propositions that are part of the best available explanation of her evidence.[26] Although this is an important step toward responding to Lehrer's objection, the restriction to available explanations is not enough by itself. This is because even though S does not have any equally good rival explanations to her best explanation available to her, it might be the case that S has justification for thinking that there are such rivals for any of her best available explanations. If S has justification for this general claim about explanations, then it seems that she would have a defeater for any support that is gained by a proposition being the best available explanation of her evidence. However, it is unlikely that S has justification for believing this. For one thing, it is doubtful that most ordinary people have even considered this general claim about explanations, or that they have evidence that justifies accepting it. Further, it is plausible that there are not equally good competitors for every explanation.[27] Without a good reason to think that there are always equally good competitors for every explanation, Lehrer's objection fails to pose a problem for *EE*.

The final objection is twofold. It concerns whether there are higher-level requirements for epistemic support. Given one's view on this, one might object to *EE* in one of two

25 This is so, if we understand 'equally good competitors' to mean equally good explanations that do not include or entail the proposition in question. As noted above, *EE* does not require that there be a single 'best' explanation in order for *p* to be justified by being part of, or entailed by, the best available explanation of one's evidence. Rather, in order for *p* to be justified, *EE* requires that there not be an equally good explanation available that does not include, or entail, that *p*.

26 Lycan (2002) responds in this fashion on behalf of his explanationism.

27 Laudan and Leplin (1991) argue that there are not always empirically equivalent rivals to scientific theories. If they are correct, this provides reason to think that there could be a single best explanation in a given situation.

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ways. On the one hand, some philosophers think that in order for S to have epistemic support for *p*, S must either have a higher-level belief to the effect that her evidence supports *p* or have some sort of direct awareness that her evidence supports *p*.[28] These philosophers might object that *EE* makes epistemic support too easy because it does not require any such belief or direct awareness. On the other hand, other philosophers (with more externalist views of epistemic support) might think that there are no higher-level requirements at all.[29] Thus, they might object that *EE* over-intellectualizes epistemic support because it requires S to have either (1) a disposition (on the basis of reflection alone) to have a seeming that *p* is an answer to an explanatory question or (2) a disposition (on the basis of reflection alone) to have a seeming that *p* is entailed by the best explanation available to S at *t* for why S has the evidence she does.

Although a full response to both of these views is beyond the scope of this article, a few things can be said in response to each objection.[30] Against those who claim that *EE* makes epistemic support too easy by not including a higher-level belief requirement, it seems plausible that young children and unreflective adults can possess evidence that supports their believing various propositions. However, it is highly unlikely that children and unreflective adults form higher-level beliefs about what their evidence supports. It is also plausible that S's evidence can support believing a proposition for her even if she has not consciously considered the relationship between her evidence and that proposition. So, it is reasonable to think that S's evidence can support believing a proposition despite S not being directly aware of the relationship between her evidence and the proposition. Thus, the fact that *EE* does not require higher-level beliefs, or direct awareness of the relationship between *p* and one's evidence, is a strength of the account – *EE* makes epistemic support just easy enough.

Against those who claim that *EE* over-intellectualizes epistemic support by requiring S to be disposed to either (1) have a seeming that *p* is an answer to an explanatory question or (2) have a seeming that *p* is entailed by the best explanation available for why S has the evidence she does in order for *p* to be supported by her evidence, two points can be made. First, without this sort of requirement, accounts of epistemic justification would seem to imply that S has epistemic support for propositions that she cannot even understand. Without the higher-level requirement that S possess the concepts necessary to understand *p* in order for her evidence to support believing *p*, S could have epistemic support for a proposition that she lacks the requisite concepts to understand. It is implausible to think that one can have epistemic support for any proposition that she cannot understand. Secondly, there is reason to think that this sort of disposition is not too hard to come by. As noted above, this sort of disposition does not require one to have the well-developed concepts 'evidence', 'explanation', 'logical consequence' or 'entailment'. All that is required is the ability to understand something as an answer to a why-question and the ability to have a seeming that, for example, the truth of *p* and *if p, then q* ensure the truth of *q*. Additionally, it is plausible that even the unreflective are good at using and recognizing explanations – even more so at recognizing propositions as answers to why-questions. In fact, there is evidence that children are not only good at evaluating

28 See, for example, Fumerton 1995, 2004.

29 See, for example, Greco 1999, 2000.

30 For a more complete argument against both of these positions on higher-level requirements, see Tucker (2012).

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explanations, but have 'powerful and flexible theory-formation abilities'.[31] Young preschoolers ask explanatory why-questions and 'almost as early as the first why-questions are the first attempts at explanations.'[32] Therefore it is not implausible to think that the dispositions required by *EE* do not put epistemic support out of reach of the young or unreflective.

4. CONCLUDING REMARKS

EE makes progress in one area of the evidentialist theory of justification that Conee and Feldman identify as needing more work. Of course, more must be said about *EE* before it can be considered a complete account of epistemic support. In particular, an account of what makes one explanation better than another would be an extremely helpful addition to *EE* or any explanationist account of epistemic support. Although progress has been made in discussions of explanatory virtues, a complete account of when one explanation is better than another has yet to emerge. Despite the need for more research, the considerations provided here show that *EE* is a step in the right direction and that it at least warrants further investigation.

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31 Gopnik 1998, 103. See also Brewer, Chinn and Samarapungavan (2000) for evidence in support of this.

32 Keil 2006, 245.

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