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ORIGINAL ARTICLE

Explanationism and Justified Beliefs about the Future

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Abstract Explanationism holds that a person's evidence supports a proposition just in case that proposition is part of the best available explanation for the person's evidence. I argue that explanationism faces a serious difficulty when it comes to justified beliefs about the future. Often, one's evidence supports some proposition about the future but that proposition is not part of the best available explanation for one's evidence. Attempts to defend explanationism against this charge are unattractive. Moving to a modified better contrastive explanation account will help with these cases, but it will face other difficulties.

Under just what conditions does a person's evidence support a proposition? Many evidentialists would agree that this question is a very important one for contemporary work on the subject of epistemic justification. For, evidentialists typically hold that a person S is justified in believing a proposition p at a time t just in case the evidence S has at t supports p.[1] In this paper, I will address one answer to the aforementioned question and show that it faces a very serious difficulty. The answer I address is the best explanation answer proposed by Earl Conee and Richard Feldman, which is no doubt viewed favorably by others as well. It says that a person's evidence e supports a proposition p at a time t just in case p is part of the best available explanation for the evidence S has at t.[2] I want to show that this view, when coupled with an evidentialist

[1] The primary targets I have in mind are Conee, Feldman, and their students. But, others have endorsed this view, or views in its near proximity, as well. See, e.g., Clifford (1999) and Locke (1989) for historical antecedents of the view. And see Neta (2007) for a another contemporary defender of it.

[2] A similar requirement on knowledge was proposed by Moser (1989). The arguments of this paper against the best explanation requirement for justification are equally arguments against the best explanation requirement for knowledge.

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view about epistemic justification like the one Conee and Feldman accept, conflicts with intuitive judgments concerning justified beliefs about the future. There are cases where we intuitively judge persons to be justified in believing certain propositions about the future, though according to the best explanation account their evidence doesn't support these propositions.

I will pursue this line of argument in four stages. First, I present Conee's and Feldman's answer to the question about just when our evidence supports propositions in more detail. I suggest that there is a great deal of interest to discuss about their view, but I leave much of that discussion for another occasion. Second, I present my primary concern for their best explanation view—the concern that their view conflicts with intuitive judgments concerning justified beliefs about the future. Third, I consider how one might try to defend Conee's and Feldman's view against this difficulty, showing that the best strategies I can envision all have a high asking price. Fourth, I consider how the best explanation view might be modified in order to handle cases like those I mention. The best proposal, I think, is for the explanationist to move from a best explanation account to a better contrastive explanation account. Unfortunately, this view also faces serious difficulties.

1 Conee's and Feldman's Explanationism

In this section, I will provide a brief overview of Conee's and Feldman's evidentialist views, highlighting what they have to say in response to the central question posed above concerning under just what conditions a person's evidence supports a proposition. I begin by showing why the relation of evidential support—the relation which obtains between evidence and a proposition just when that evidence supports the proposition—is so important to their views.

The particular variety of evidentialism which Conee and Feldman defend says the following:

> (EJ) Doxastic attitude D toward proposition p is epistemically justified for a subject S at time t iff D is the attitude which fits the evidence S has at t. (Conee and Feldman 1985)

EJ, as is clear, is intended to offer an account of the justificatory status of *any* attitude. Further, EJ itself says nothing directly about evidential support. However, EJ does say something about evidential fit. It is only the attitudes that fit the evidence which are justified. We can learn something about what Conee and Feldman believe about just when the attitude of belief fits a subject's evidence by considering their endorsement of the following claim:

> (E) S is justified in believing p at t iff S's evidence at t on balance supports p. (Conee and Feldman 2008)

From EJ and E it follows that the doxastic attitude of believing p fits the evidence S has at t iff S's evidence at t supports p. It is clear, then, that the relation of evidential support is quite important for understanding Conee's and Feldman's evidentialist

views. For, the relation of evidential support at least partially defines the relation of evidential fit.[3]

For this reason it is understandable that Conee and Feldman would like to say more about the relation of evidential support. What is surprising is that it is only recently that they have done this. Their most extended treatment of the relation of evidential support comes in their (2008). In Sect. 3 of this paper, they consider several competing answers to the question of just when evidence supports a proposition. They argue against several of these and then propose their own best explanation account.

It is instructive to note the reasons they offer for rejecting some of the competing accounts. They consider four competing accounts. These are proportionalism (3.1), subjectivism (3.2), a non-doxastic seeming view (3.3), and Chisholmian principle-based accounts (3.4). Proportionalist views say that whether evidence e supports a proposition p is a matter of whether the right sort of logical or probabilistic relation obtains between e and p. Conee and Feldman reject proportionalist accounts because they imply that persons are justified in believing a proposition p which bears the right probabilistic or logical relations to their evidence, even when these persons are ignorant of this relation's obtaining. They write, "A person may know some propositions that logically entail some proposition that the person scarcely understands and surely does not know to follow from the things she does know." When this happens, Conee and Feldman think the person is not justified in believing the proposition in question; but, proportionalism implies that the person is justified in believing this proposition. Subjectivism, by contrast, says that a subject S's evidence e supports p iff S believes that the right sort of probabilistic or logical relation obtains between e and p. Conee and Feldman reject this view because it requires "a meta-level requirement that we reject—namely, that justified belief in all cases requires believing that some suitable objective relation holds between one's evidence and the content of one's beliefs." Against this view, they affirm that "There can be knowledge and justified belief in the absence of any such beliefs about evidential relations. Children and unsophisticated believers provided clear examples of this."

I said it is instructive to consider their reasons for objecting to these accounts. This is because, by seeing why they reject these accounts, we can learn something about the constraints they believe the correct account of the evidential support relation must meet. Interestingly, their rejection of both proportionalist and subjectivist accounts of evidential support makes for some tension in their views. For, it seems that their reason for rejection proportionalist accounts is that these accounts don't require that the subject have the right kind of mental state concerning the relationship between her evidence and the proposition it supports, but that the reason they reject subjectivist accounts is that they requires that the subject have just

[3] One might propose a complete definition of the evidential fit relation in terms of the evidential support relation, though this is not necessary for defending the importance of the support relation in Conee's and Feldman's work. The proposed definition would be: Doxastic attitude D toward p fits S's evidence e iff D is belief and e supports p or D is disbelief and e supports not-p or D is suspension of judgment and D neither supports p nor not-p. I am neither endorsing this definition nor attributing it to Conee and Feldman, however.

this sort of mental state. One might wonder whether they are attempting to have their cake and eat it too.

I don't think they are attempting this, however. There are candidates for mental states which act as a kind of bridge between one's evidence and the proposition which it supports other than beliefs concerning probabilistic or logical relations running from one's evidence to the target proposition. These candidates include things like dispositional beliefs, dispositions, and (conceptual or nonconceptual) awarenesses.[4] Conee and Feldman are probably thinking that it is some mental state like these which the subject must have which bridges the gap between her evidence and a proposition if her evidence is to support that proposition. In my view, this issue concerning just what kind of bridge mental state must obtain in order for a subject's evidence to support a proposition is a very important one for someone attracted to the views of Conee and Feldman to consider. However, I will not pursue the issue further here. All I want to point out is that their own best explanationist account must not violate the constraints their critiques of proportionalism and subjectivism impose on the correct account of evidential support.

Conee's and Feldman's own proposal concerning just when a subject's evidence supports a proposition appeals to explanatory relations, rather than logical or probabilistic relations. They write,

> We believe that the fundamental epistemic principles are principles of best explanation. Perceptual experiences can contribute toward the justification of propositions about the world when the propositions are part of the best explanation of those experiences that is available to the person. Similarly, the truth of the contents of a memory experience may be part of the best explanation of the experience itself. Thus, the general idea is that a person has a set of experiences, including perceptual experiences, memorial experiences, and so on. What is justified for the person includes propositions that are part of the best explanation of those experiences available to the person. Likewise, one's inferences justify by identifying to one further propositions that either require inclusion in one's best explanation for it to retain its quality or enhance the explanation to some extent by their inclusion. (Conee and Feldman 2008)

If we read this paragraph in a woodenly literal way, then Conee and Feldman are only suggesting sufficient conditions for evidence to support propositions. They say that perceptual experiences contribute to justification "*when* they are part of the best explanation" rather than saying that they do so *when and only when* they are part of the best explanation and that "what is justified for the person *includes* propositions that are part of the best explanation" rather than saying that what is justified includes *all and only* propositions that are part of the best explanation. However, the context suggests that we should not read the passage in this woodenly literal way. Instead, the context suggests very strongly that we should read the passage as offering necessary and sufficient conditions for evidential support. Read in this way, the passage offers the following proposal concerning evidential support:

[4] I am thinking here of the kinds of non-conceptual direct acquaintances which appear, for instance, in Fumerton (1995).

(EXP) S's evidence e supports a proposition p at t iff p is part of the best explanation for e available to S at t.

I'll mention three reasons why the context very strongly suggests a biconditional like EXP rather than a simple conditional (i.e., the right to left direction of EXP).

First, as mentioned earlier, Conee's and Feldman's presentation of their explanationist view comes as the final part of a larger section where they are evaluating various approaches to the question of when a person's evidence supports a proposition. They call the answers which they consider to this question in Sects. 3.1–3.4 "views" and "accounts" of evidential support. And when it comes to their own approach, they call this approach the "explanatory coherence view" as well. But, plausibly, to have a view or an account of evidential support simply requires having a biconditional which specifies under just what conditions a person's evidence supports a proposition. Indeed, all of the other views or accounts of evidential support discussed in Sects. 3.1–3.4 are treated as biconditionals. So, it is reasonable to assume that Conee's and Feldman's explanationist account is likewise to be taken as a biconditional rather than a simple conditional.

Second, it is quite instructive to consider the way in which the views of Sects. 3.1–3.4 are expressed as compared with how they are evaluated. Though Conee and Feldman clearly evaluate these views as though they are biconditionals, they do not in every case explicitly state these views as biconditionals. This is especially so in Sect. 3.3 where they consider the non-doxastic seemings view. They explicitly state this view as only a conditional: "E supports C for a person S provided that it seems to S that E has a proper logical or probabilistic relation to C (96)." Check any introductory logic text and you will find that "provided that" is a stylistic variant for "if"—not for "if and only if." However, when Conee and Feldman evaluate this view, they attack it as if it were indeed a biconditional and not simply a conditional. They write, "We do not find this view satisfactory. For one thing, these non-doxastic seemings are not *necessary* for justification (96, emphasis added)." Similarly, while Conee and Feldman use no conditional statement at all, let alone a biconditional statement, to characterize the "evidential proportionalism" view of 3.1, they clearly evaluate this view as implying conditionals. What we should take away from this is that in 3.1–3.5 Conee and Feldman were not being so careful in the way they stated the views they were interested in considering but that, nonetheless, they were clearly interested in *biconditional* accounts of evidential support.

Third, and perhaps most importantly, we must consider what Conee and Feldman say about the relationship between their view and the Chisholm-inspired epistemic principles view of Sect. 3.4. On this latter approach, the epistemologist identifies a bunch of special epistemic principles and says that these are the whole story of evidential support, that they are rock bottom for epistemology. Conee and Feldman write that what is "distinctive and troubling" about this view is that "these principles do not derive from any more fundamental or more general ones (97)." Because of this, Conee and Feldman worry that someone might charge the view with arbitrariness, since it admits some principles *and not others* without an explanation for why it admits some and doesn't admit the others. They write:

"There is a troubling arbitrariness and specificity about [Chisholm's] choice of principles. This can best be seen by considering contested cases. Some will say that certain kinds of religious experiences provide justifying evidence for propositions about the existence and nature of God. Others deny this. Chisholm's view seems to imply that one side or the other is right in this dispute, but there are no more fundamental principles to resolve the dispute." Against this conception, Conee and Feldman maintain that "There must be a more illuminating truth about why the experiences are justifying (97)." They affirm, "In our view, if perceptual and memorial experiences are justifying … then there is something about them that makes this the case. If religious experience shares this feature, then it, too, is justifying. *If it does not, then it is not* (97, emphasis added)."

What we can gather from this is the following. Conee and Feldman are interested in an account of evidential support which can explain why those Chisholm-like principles which are true are true and why those competing Chisholm-like principles which are false are false. But, significantly, their explanationist view could do this—specifically, it could rule out as false those principles which are false—only if it provided necessary conditions for evidential support and not simply sufficient conditions. Thus, it is quite charitable to understand their explanationist view in terms of EXP. EXP tells us that when a person's evidence has the feature of being partially best explained by a proposition it justifies that proposition, and, very importantly, EXP also tells us that when a person's evidence *doesn't* have this feature, it *doesn't* justify that proposition. This is exactly what Conee and Feldman want their explanationist view to do. And there is no immediately available candidate for understanding their explanationist view as presented in the passage above which would accomplish this any better than EXP. I conclude, on the basis of these three considerations, that attributing EXP or something in its very near neighborhood to Conee and Feldman is not uncharitable.[5] It is perhaps possible that Conee and Feldman had something slightly different in mind; but, EXP is about as good as one might hope to do as a first approximation of finding a clear and precise articulation of the sort of view they intended. So I shall treat it as their view for practical purposes here.

We must remember that EXP must not violate the constraints imposed on the account of evidential support suggested by Conee's and Feldman's rejection of proportionalist and subjectivist accounts. Whether EXP is able to do this turns on how we understand what it is for an explanation to be available to a person. As Conee and Feldman themselves write, "A precise account of this availability is difficult to develop." Presumably, it mustn't be that in order for p to be an explanation of e available to S, S must believe that p is part of the best explanation for S. For, just like there are cases of knowledge and justified belief where the subjects do not believe that the kinds of probabilistic or logical relations which the proportionalist invokes obtain between their evidence and the propositions it supports, there are cases of justified belief and knowledge where subjects do not believe that the explanatory relations invoked by EXP obtain either. At least, this is extremely plausible. Yet, we can't let p be the best explanation for e available to S

[5] Thanks to an anonymous referee for pressing me on this point.

without S having some kind of mental state which serves as a bridge from e to p, lest EXP is saddled with the problems of proportionalism. Whether EXP can successfully navigate between the Scylla and the Charybdis here is, as far as I can tell, unforeseen.

Yet, I don't want to focus in this paper on whether EXP can avoid these difficulties. Instead, I want to show that there is another even more threatening problem for EXP. EXP, when combined with E—Conee's and Feldman's thesis about when the attitude of belief is justified—conflicts with intuitive judgments concerning justified beliefs about the future. There are cases where we intuitively judge that persons are justified in believing things about the future but where EXP and E imply that they are not.

2 Explanationism and Justified Beliefs about the Future

I take it as a datum of common sense that we are justified in taking attitudes about propositions which report things about the future. We make decisions on the basis of beliefs about the future daily. I believe that tomorrow so-and-so will be in the office, that my internet will be working, et cetera. Often, such beliefs are justified. A view about justification which said that these beliefs couldn't be justified would be a view which had given into the skeptic. So, it is significant if Conee's and Feldman's explanationist account of evidential support cannot account for the kinds of justified beliefs about the future which intuition ratifies.[6] As it turns out, it cannot.

Let me pick one particular example. Suppose I'm on the golf course on a sunny, calm day. My putting stroke has been working for me most of the day, and I'm now on the sixteenth green. It's not a long putt—just six feet. I'm fairly confident. I rotate my shoulders, pulling the putter back, and then accelerate through the ball. It rolls toward the cup. The speed looks good. The line looks on. Yes, I believe it's going in!

Now, I think that in such cases, I may very often be justified in believing things about the future. If the ball doesn't go in, I'll say "Dang, I thought for all the world it was going in." If it goes in I'll say "I knew I had it!" Each of these is a sensible thought. In these kinds of circumstances, I am justified in believing that the ball will in some short time roll into the cup. But Conee's and Feldman's best explanation view cannot account for this. Consider what EXP says about the case. EXP says that my evidence supports the claim that the ball will roll into the cup just in case the proposition that the ball will roll into the cup is part of the best available explanation for my current evidence. But this is implausible. Surely the ball's rolling into the cup at some later time doesn't explain why right now I have the evidence that I do. My current evidence consists in my memories of my puts earlier in the day, my

[6] As one referee pointed out to me, one might attempt to argue from other commitments in Conee's and Feldman's (2008) that they should indeed accept many instances of justified belief in future propositions like the cases presented in this paper. For, Conee and Feldman judge that where some proposition p is a reliable indicator that q and where S has p as evidence and also has sufficient information about the connection between p and q, S will be justified in believing q subject to defeaters. See their discussion of "scientific evidence" at an earlier stage in their (2008).

visual awareness of the ball's rolling, my sense of the temperature and lack of wind, and the like. What explains this evidence is a body of current and perhaps past propositions. I have this evidence because my memory and visual apparatuses are working well, because the ball is in fact rolling toward the cup, because it is in fact a sunny calm day, and so on. But little, if any, future facts enter into the best explanation for my current evidence. So, according to EXP, my evidence does not support the claim that the ball will soon roll into the cup. Given thesis E, it follows that I am not justified in believing that the ball will roll into the cup. But this conflicts strikingly with intuition. Intuition reports that I am justified in believing that the ball will roll into the cup. So, EXP, when coupled with E, conflicts strikingly with intuitive judgments concerning justified beliefs about the future.

Cases like the golf ball case abound. I am frequently justified, according to the standards of intuition, in believing propositions about the future where it is quite implausible to suppose that these propositions are part of the best available explanation for my current evidence. In all such cases, EXP conflicts strikingly with our intuitive judgments concerning justification. This is serious cause to reject EXP as the correct account of evidential support.

Nonetheless, the defender of EXP might dig in her heels in a number of ways. In the next section, I consider several of the most plausible of those ways. I show that none is ultimately attractive.

3 Defending EXP

The defender of explanationist views might try to insist that, despite the initial appearance of oddity, the ball's rolling into the cup some short time hence in fact *does* explain why I have the current evidence I do. Or, at least, it is part of the best explanation for why I have this evidence. In this section I will consider three proposals to this end.

To begin with, some have found it quite plausible that temporally backward explanations are perfectly ubiquitous. For instance, my tidying my apartment right now may be best explained by my brother's coming over tomorrow. I will say, if you ask me, that I am tidying the apartment "because of his coming on the morrow." More generally, Jenkins and Nolan (2008) have offered the following argument in favor of the ubiquity of backwards explanations:

(1) There are apparently appropriate uses of language which suggest backward explanations.
(2) The only way to explain these linguistic data without allowing for the ubiquity of backwards explanations is to offer a plausible substitute, in each case, for what speakers meant which doesn't involve some future thing explaining a past thing.
(3) It is impossible to offer plausible substitutes, in each case of apparently appropriate linguistic usage which suggests backwards explanations, for what speakers meant which doesn't involve some future thing explaining a past thing.

(4) So, we cannot explain the apparently appropriate uses of language which suggest backward explanations if we do not allow for the ubiquity of backwards explanations.

Premise (1) is supported by cases like the tidying case above as well as many others. Witness: "The volcano is smoking because it is going to explode;" "The flower closed up because it was going to rain," and so on. Premise (3) Jenkins and Nolan support by arguing that the only plausible substitutes in many cases appeal to explanations of which the speakers are hardly aware. Writing generally about attempts to account for the appropriateness of the foregoing linguistic data without allowing for backwards explanations, they write: "Even if in each case of apparent backwards explanation we were prepared to acknowledge the existence of some explanation of the explanandum event in terms of dispositions, likelihoods, or whatever, we can as yet see no good reason to regard these replacement explanations as 'the real' explanations in the sense of the ones which were really intended. We doubt whether all the everyday examples of apparently backwards explanation are plausibly interpreted as invoking dispositions, intentions, likelihoods, or whatever." Thus, (3) follows—it is not possible to find plausible candidates for what was *really meant* by the speakers in cases like those which support (1) which can be understood in such a way that the speakers are *not* invoking backward explanations. And from (1), (2), and (3), (4) clearly follows.

The glaring problem with this argument, however, is premise (2). For, this premise ignores a completely commonplace method in philosophy of explaining apparently appropriate linguistic usage which conflicts strongly with intuition or with a theory. *One* way to explain such usage is to say that what is *really meant* by the speaker is something consistent with the intuition or theory we wish to preserve. But there is another perfectly ordinary way, too. Often, in order to accommodate certain apparently appropriate linguistic data which conflict strongly with intuition or with a theory we would like to preserve, the philosopher will suggest that the apparently appropriate linguistic data are all strictly speaking false, but that there is, for each instance, something in the near neighborhood which is true, and hence the linguistic items are innocuously false.[7] This method, too, preserves both the appearance of appropriateness in the linguistic data and the theory or intuition with which it conflicts. And, it seems to be just the right method for the one attracted to the view that backward explanations are not ubiquitous to employ here. The reason that the linguistic data which support (1) seem appropriate despite the fact that there are hardly ever backward explanations is not that the speakers of these sentences mean something other than that there is a backward explanation going on—maybe they do; maybe they don't—rather, it's that their sentences, though strictly speaking false, have something in their near neighborhood which is true. Those propositions in their near neighborhood which are true need not even be known to the speakers. But, so long as they are in the near neighborhood and are true, they will do the job. And, as Jenkins and Nolan are perfectly willing to accept, there are, for each of their proposed instances of linguistic data which support (1), propositions in the near neighborhood

[7] See, e.g., Merricks's (2001) defense of mereological nihilism.

of what is expressed by these sentences which are true. So, (2) is false and there is no argument from the linguistic data which support (1) to the conclusion that backward explanations are ubiquitous. They aren't.

Of course, in order for my proposed counterexample to challenge EXP, I don't need to defend the claim that backward explanations aren't ubiquitous. The important question is not whether backward explanations can be found, or even whether they are found frequently. The important question here is whether, in the golf ball example and in others similar to it, the best explanation for why I have the evidence I do is one which runs temporally backward from the future proposition in question. In our example, the question is: Is it the case that the ball's rolling into the cup shortly is part of the best explanation for why I have the current evidence I do? The answer here is very plausibly "no." What explains why I have this evidence is a body of current and past facts—facts about the ball's position now and a moment ago and such. This first attempt at defending EXP against counterexamples like the golf ball case fails.

A second way one might try to defend EXP is by pressing the following point. There is a potential explanation of why I have the current evidence I do which includes the body of current and past facts discussed in the previous paragraph *and* the claim that the ball will roll into the cup shortly which is better than one which includes the current and past facts and the claim that the ball will *not* roll into the cup shortly.[8] Perhaps, for instance, the former explanation is simpler than the latter. For, in order for the latter to be consistent, we will presumably have to posit the occurrence of something which conflicts in some way with the current evidence I have, like a strong wind. So, perhaps it is not so absurd to claim that the ball's rolling into the cup some short time hence best explains why I have the current evidence I do. After all, it seems to better explain it than any body of current and past facts together with the proposition that the ball will *not* roll into the cup some time hence.

But this defense of EXP in the face of the current counterexample faces a serious difficulty, too. For, explanations need not be maximal. That is, it need not be the case that for any explanation E and any proposition p, E includes either p or not-p. So, explanations of my current evidence in the golf ball case need not include either the proposition that the ball will roll into the cup or the proposition that it will not roll into the cup. But, then, there can be a potential explanation of my current evidence in the golf ball case which says nothing about the future. It will be one which appeals only to the body of current and past facts discussed above. And, rather clearly, this explanation will be simpler than either of the foregoing explanations which does include information about the future. So, by the criterion of simplicity, it will be a better explanation than either of these. Indeed, it will be the best. And, if so, then according to EXP, I am not justified in believing that the ball will roll into the cup in the golf ball case.[9]

[8] This claim is not itself uncontroversial, but I grant it for the sake of argument here. According to some views of explanations, a hypothesis which includes superfluous elements is not an explanation at all, and so cannot be contrasted with other explanations and called a "better explanation." See van Fraasen (1980) and Schurz (1999) for some discussion.

[9] One can resist my claim here that explanations need not be maximal. However, if one does this, then one will face the problem that the conjunction of EXP and E yields far too much as justified. If one makes all explanations maximal, then the conjunction of EXP and E will conflict with Conee's and Feldman's critique of proportionalist views.

At this point, the defender of EXP might insist that she was not requiring that explanations are maximal, but just that in the golf ball case, any explanation of my current evidence must include either the claim that the ball rolls into the cup or the claim that it doesn't. This, however, is a serious commitment about the nature of explanations which has no motivation other than the defense of EXP.

A third and final way one might attempt to rescue EXP from examples like the golf ball example is by appealing to the following argument. The claim that the ball will roll into the hole some time hence is, after all, part of the best explanation available for the subject's current evidence. For, the best explanation available to the subject will *entail* that the ball will soon roll into the hole. For, the best available explanation will be one which includes both present and past facts and laws of nature which govern the operations of things like golf balls. However, an explanation which includes both these present facts and the laws of nature will be one which entails that the ball will soon roll into the hole. So, it turns out that the best available explanation will be one which entails, and which therefore includes, the proposition that the ball will roll into the hole. So, despite appearances, there is no problem here for EXP.

There are at least two serious problems for this defense of EXP.[10] First, it is far from clear that the explanation involving the laws of nature in question will be one which is *available* to the subject. Conee and Feldman write as if a minimum requirement for an explanation's being available to the subject is that the subject sufficiently understands the explanation. This seems to be required by their rejection of proportionalist accounts. But, it is plausible that there could be a golf ball type case where the subject does not sufficiently understand the deterministic laws in question. Alternatively, the subject might understand the laws but have good reason for thinking them false—for instance, she has studied reasons for rejecting them due to data from quantum physics. In either of these situations, the best explanation available to the subject will not be one which entails that the ball will soon roll into the hole.

The second serious problem for this defense is that it relies upon deterministic laws. The laws governing the behavior of the golf ball may well not be deterministic laws. If they aren't, then it will be plausible that the best available explanation for the subject's current evidence in the golf ball example is not one which will entail the ball's rolling into the cup. So, EXP and E will still imply that I am not justified in believing that the ball will roll into the cup.

One might insist, in response to this second difficulty, that the laws are indeed deterministic and that claiming that they are is not a significant commitment. But there are two problems with such a view. First, endorsing this response involves one in endorsing the significant commitment that standard libertarian views of free action are false. For instance, suppose we take an example of future free action. Suppose my wife responds to tickling by tickling. That is, suppose that if I tickle her she tickles me back—and does so of her own accord, freely. Now, I might be justified in believing that my wife will soon tickle me, if I am now planning on

[10] A third would be as follows. Entailment isn't sufficient for inclusion in an explanation. After all, every necessary truth is entailed by any explanation, but plausibly every necessary truth needn't be *included* in every explanation.

tickling her and I have no reason to think that I will be impeded or that she will somehow be prevented from responding in the way she normally does. However, it seems that her tickling me sometime hence does not explain why I have the current evidence that I do. It doesn't explain why, for instance, I have planned to tickle her—suppose, e.g., that I have no interest at all in her tickling me back. Further, if her action is free, at least according to a libertarian conception of freedom, then there will not be any explanation which appeals to current facts and laws which will entail that she freely tickles in the future, either. So, defending EXP in the way suggested faces the severe difficulty that it implies that libertarian views of freedom are false. I am not claiming here that they are true. I actually think they are false myself. But, it would be quite odd if the correct account of evidential support entailed the denial of libertarian views of freedom. Defending EXP in this way thus comes at a high cost.

And there is another significant cost to defending EXP in this way. The defender of EXP needs to claim not just that the laws governing the actual world—including free action in the actual world— are deterministic, but that this is necessarily so. She needs to claim that the laws couldn't have been merely statistical. For, if the laws had only implied a .999 probability of the ball's rolling into the hole, I still would have been justified in believing that it will soon roll into the hole. Yet, the best explanation available to me would not have been one which included deterministic laws which entailed the ball's rolling into the hole. So, according to EXP, my evidence would not have supported the claim that the ball will soon roll in. And this result, given E, conflicts strikingly with intuition.

For the above reasons, then, I think that EXP is in grave trouble. It fails to account for an impressive range of justified beliefs about the future. In these cases, the propositions about the future which the subjects are justified in believing seem not to be part of the best explanation for the subject's current evidence. Further, the most plausible defenses of EXP against this charge fail. For, first, *pace* Jenkins and Nolan, backwards explanations are not ubiquitous. And, even if they were, they don't occur in the cases cited. Second, explanations need not be maximal. So, the fact that some explanation which cites the relevant future propositions might be better than any which cite their negations doesn't imply that an explanation which cites these propositions is best. And, third, the defender of EXP should not appeal to deterministic laws to defend her view of evidential support. Anyone attracted to Conee's and Feldman's account of evidential support should reject EXP.

4 Conclusion

We have seen in the foregoing two sections that there is good reason to reject EXP. For, EXP conflicts strikingly with intuitive judgments concerning justified beliefs about the future and there seems to be no ultimately satisfying way of defending EXP against this charge. In the face of this difficulty, the best hope might be to modify EXP in such a way that it avoids the conflict with justified beliefs about the future but retains at least some of its original motivation. In my view, this is the way forward for explanationist accounts of evidential support.

The careful reader may have already detected a suggestion about how to modify EXP. I said earlier that although in the golf ball case an explanation of my current evidence which includes the proposition that the ball will roll into the cup is not the best available explanation for my current evidence, it is more plausible that such an explanation is better than any explanation which includes the proposition that the ball will *not* roll into the cup. Perhaps, then, it would be better for us to define the explanationist view in terms of best contrastive explanation rather than best explanation simpliciter. Instead of defining explanationism in terms of EXP, we should define it more along the following lines:

> (EXPC) S's evidence e supports proposition p at time t iff p is part of an available explanation of e which is better than any explanation of e which includes not-p.

EXPC stands a better chance than EXP of yielding the correct result in the golf ball case and others like it. And, importantly, EXPC seems nearly equally as motivated as EXP. For, the primary motivation cited by Conee and Feldman for EXP was that it seemed to do well with cases of perception and memory. EXP suggests, for instance, that the proposition that there is a computer before me is justified for me because it is part of the best available explanation for my current experience as of a computer. The defender of EXPC can likewise insist that the reason this proposition is justified for me is that it is part of an available explanation of my current experience as of a computer which is better than any available explanation for my current experience which includes the proposition that there is not a computer before me. EXPC, then, allows the explanationist to retain much of the initial motivation for EXP without the conflict EXP faces with intuitive judgments concerning justified beliefs about the future.

This is not to say that EXPC is worry-free. Some will worry about whether it is in fact true, for instance, that there is an available explanation of my current evidence in the golf ball case which includes the proposition that the ball will roll into the hole which is better than any explanation including the proposition that it will not. They will worry, similarly, that my experience as of the computer is just as well explained without the claim that there is a computer as with it.[11] Others will worry that EXPC will not in the end be able to avoid the problems which Conee and Feldman urge against proportionalism and subjectivism. They will be concerned that the availability constraint, on final analysis, just cannot be filled out in a fully satisfactory way.

These are indeed serious difficulties the defender of EXPC must face. However, it is noteworthy that they are only difficulties which EXPC shares with EXP. If either of these difficulties is insuperable, then both EXPC and EXP fail. So, I suggest that the defender of EXP, as she must think that there is some answer to these difficulties, should move to EXPC. For the aforementioned difficulties faced by EXPC are difficulties shared by EXP. But EXP, as we have seen, faces an additional difficulty which EXPC does not—it conflicts with intuitive judgments concerning justified beliefs about the future.

[11] I'm thinking here of those who, *pace* Vogel (1990), are not very keen on whether the things we believe about the external world really do better explain our current evidence than their denials.

Unfortunately, EXPC faces a unique difficulty of its own. EXPC, when combined with central evidentialist theses, implies that where two competing explanations of my evidence are on par with respect to their explanatory power, and where both include superfluous claims p or not-p, I am justified in believing the simpler of the two explanations just because it is simpler. However, this result conflicts with intuition. Consider again the golf ball case. Suppose that, as I put the ball, I have very little evidence concerning the number of ducks in the world. All I know is that I've seen a handful of them. Now, contrast the following two explanations of my current evidence. *Explanation One*: What explains my current evidence includes a body of present and past facts concerning the wind, the ball, my having putted well most of the day…. and the claim that there are less than two million ducks in the world. *Explanation Two*: What explains my current evidence includes a body of present and past facts concerning the wind, the ball, my having putted well most of the day…. and the claim that it is not the case that there are less than two million ducks in the world. Explanation One and Explanation Two are on par concerning their explanatory power. Each equally explains my current evidence. However, Explanation One is better than Explanation Two. For, Explanation One is simpler, or at least more parsimonious, than Explanation Two. And, by a simple application of Ockham's Razor, where two explanations are on par with respect to their explanatory power, the simpler or more parsimonious one is better. But, then, according to EXPC, my evidence supports the claim that there are less than two million ducks in the world. So, by thesis E, I am justified in believing that there are less than two million ducks in the world. But this result, I think, clashes with intuition. Intuition tells us that I am not justified in believing that there are less than two million ducks in the world in this case. If I am justified in taking any attitude toward the proposition that there are less than two million ducks in the world, I am justified in suspending judgment concerning this proposition.

One might suggest that the problem with this example is that it relies upon the inclusion of superfluous elements in the contrasted explanations or that it requires that simplicity alone makes an explanation enough better than its competitors for that explanation to be supported by one's evidence. However, if this is supposed to be a problem with the duck example, it is equally a problem with the original example where the contrasted explanations include either the proposition that the ball will roll into the cup or that it won't. These propositions, too, add superfluous elements to a perfectly fine explanation of my evidence. And, if we deny that simplicity alone makes a contrasted explanation sufficiently better for my evidence to support it, then EXP will conflict with our intuitive judgments in the original golf ball case just as much as did EXP. For, it is only by virtue of being simpler that the explanation of my evidence in the golf ball example which includes the proposition that the ball will soon roll in is better than any explanation of my evidence in that example which includes the proposition that the ball *won't* roll in. Thus, EXPC either runs into difficulties with the duck example or it faces the same difficulties as EXP.

Because of this difficulty for EXPC, one can pose a dilemma for the defender of explanationism. Either explanationism is committed to best explanations as in EXP or explanationism is committed to better contrastive explanations as in EXPC. If

explanatinoism is committed to best explanations, then it conflicts with intuitive judgments concerning justified beliefs about the future. If it is committed to better contrastive explanations, then it conflicts with intuitive judgments concerning justified attitudes about propositions which would seem to be superfluous elements of any explanation of one's evidence. The difficulty with using best explanations is that it requires too much. But, the difficulty with using better contrastive explanations is that it requires too little. And there seems to be no way of fixing the explanation view so that it avoids both of these problems. I suggest, then, that someone attracted to the evidentialist view that one is justified in believing a proposition p at t just in case one's evidence supports p at t look elsewhere for an account of this important relation of evidential support.

References

Clifford, W. K. (1999). The ethics of belief. In T. Madigan (Ed.), *The ethics of belief and other essays* (pp. 70–96). Amherst, MA: Prometheus.

Conee, E., & Feldman, R. (1985). Evidentialism. *Philosophical Studies, 48*(1), 15–34.

Conee, E., & Feldman, R. (2008). Evidence. In Q. Smith (Ed.), *Epistemology: New essays*. Oxford: Oxford University Press.

Fumerton, R. (1995). *Metaepistemology and skepticism*. Lanham, MD: Rowman and Littlefield.

Jenkins, C., & Nolan, D. (2008). Backwards explanation. *Philosophical Studies*, *140*(1), 103–115.

Locke, J. (1989). *An essay concerning human understanding*. Ed. Peter Nidditch. Oxford: Clarendon.

Merricks, T. (2001). *Objects and persons*. New York: Oxford University Press.

Moser, P. K. (1989). *Knowledge and evidence*. New York: Cambridge University Press.

Neta, R. (2007). Propositional justification, evidence, and the cost of error. *Philosophical Perspectives, 17*(1), 197–216.

Schurz, G. (1999). Explanation as unification. *Synthese*, *120*(1), 95–114.

van Fraasen, B. (1980). *The scientific image*. Oxford: Clarendon.

Vogel, J. (1990). Cartesian skepticism and inference to the best explanation. *Journal of Philosophy, 87*(11), 658–666.