The Evidential Support Relation of Evidentialism

Evidentialist theories of epistemic justification define epistemic justification at least partially in terms of what a person’s evidence supports, claiming that a person is justified in believing a claim just in case her evidence supports that claim. This evidential support relation—the relation that obtains when a person’s evidence “supports” a claim in the sense required by evidentialist views—is the topic of this essay. The question that animates the essay is, “Just when does a person’s evidence support a claim?”

I begin in Section 1 by contextualizing the project of answering this question within the broader project of explicating the details of evidentialism. This contextualization will allow me to narrow the focus of the essay while also highlighting the potentially broader significance of its topic. I then turn in Sections 2-4 to offer a critical introduction to three different approaches to answering the question: explanationist approaches, probabilistic approaches, and psychologistic approaches.

1. The Support Relation in the Context of Evidentialist Theory

An excellent place to begin one’s inquiry into the evidential support relation is with Earl Conee and Richard Feldman’s essay “Evidence” (2008). They begin this essay by offering a “bare statement” of a full evidentialist theory of epistemic justification which appeals explicitly to the relation of evidential support. Its central affirmations are:

(T1) An agent S is justified in believing a claim p at a time t iff S’s evidence at t supports p.

(T2) An agent S is justified in disbelieving a claim p at a time t iff S’s evidence at t supports ~p.

(T3) An agent S is justified in suspending judgment with respect to p at a time t iff S’s evidence at t is counterbalanced with respect to p.

While T3 doesn’t clearly invoke the evidential support relation in the way T1 and T2 do, it may be that it does so implicitly, insofar as the relation of evidential counterbalancing can be explained in terms of the relation of evidential support.

 This statement of evidentialism may be regarded as a partial explication of Conee’s and Feldman’s earlier statement of evidentialism in their classic paper, “Evidentialism” (1985):

(EJ) A doxastic attitude D toward a proposition p is epistemically justified for a person S at a time t iff having D toward p fits the evidence S has at t.

T1-T3 partially explicate EJ by identifying when the attitude types of belief, disbelief, and suspension of judgment fit the evidence a person has regarding p. EJ itself provides an account of propositional justification. It can also be utilised to provide an account of doxastic justification through the addition of a requirement regarding proper basing.

 While T1-T3 partially explicate EJ, they do not by themselves provide a full evidentialist theory of epistemic justification, even when supplemented with a suitable proposal regarding the relationship between propositional and doxastic justification. This is because key concepts within T1-T3 are left crucially undetermined. As Conee and Feldman put it, “Among the things needed to develop the theory more fully are 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” (2008: 84). This essay is concerned with accounts of the third item in the list—i.e., accounts of when the evidence a person has supports a proposition. The animating question is, “Just when does a person’s evidence ‘support’ a proposition p in the sense of ‘support’ relevant for T1-T3?” It is important to note at the outset that this sense of “support” may differ from other senses of “support.” For example, some epistemologists who reject T1-T3 may nonetheless appeal to a notion of evidential support as part of their alternative theory of epistemic justification; this sense would conflict with the sense that is the focus here, though there may also be overlap. Likewise we might think that there is a sense of support that may not be essentially epistemic in which any proposition that entails another proposition thereby supports that other; but, as we will see, such a sense of support differs from that in view here, even if there is overlap between the two. The focus here is on accounts of the evidential support relation referenced by the language of “support” in T1-T3.

 While accounts of this evidential support relation would most immediately illuminate evidentialist theories of epistemic justification, they may inform epistemological theorizing regarding other topics as well. For instance, if knowledge or understanding require justification, and justification is at least partially explicable in terms of this evidential support relation, then knowledge and understanding are partially explicable in terms of it as well. Likewise, if some or all intellectual virtues are at least in part a matter of how a person behaves when her evidence does or does not support some claim in the relevant sense, then some or all intellectual virtues are partially explicable in terms of this evidential support relation. Examination of alternative approaches to accounting for this relation of evidential support is therefore clearly motivated for those committed to evidentialist theories of epistemic justification, and it may also yield benefits further afield in epistemological theorizing. Here I will focus on three approaches to accounting for this relation that prominently employ either explanatory, probabilistic, or psychological concepts.

1. Explanationist Approaches

I’ll begin by considering approaches to accounting for the evidential support relation of evidentialism with which Conee and Feldman themselves express most sympathy—explanationist approaches. As a point of departure, a simple formulation of explanationism inspired by Conee’s and Feldman’s text (2008: 97-8) is as follows:

(EXP) A subject S’s evidence E supports a proposition p at a time t iff p is part of the best explanation available to S at t for why S has E.

EXP, combined with T1-T3, makes the epistemic justification of propositions for a subject a matter of the explanatory relationship between these propositions and the subject’s evidence. In this respect, it is reminiscent of views defended by Harman (1986), Lycan (1988) and Moser (1989). More recently, similar explanationist approaches to epistemic justification have been defended by McCain (2014a) and Poston (2014).

 Numerous objections have been raised to EXP and similar accounts of evidential support in recent scholarship. In this section, I concentrate on a sample of these objections that in my view motivate modification or abandonment of explanationist theories, beginning with objections to their necessity condition. In Section 4, I discuss an objection relevant to evaluating the concept of availability employed in these views. For now, I simply note that this concept is typically defined so as to require the subject S to have some kind of psychological orientation toward the explanatory relationship between p and E.

 An early objection to explanationist views argued against their necessity condition on the grounds that it failed to adequately capture the role of entailment relations in accounting for evidential support. For example, Lehrer (1974) argues that he could be justified in believing that a mouse is five feet from an owl on the basis of his knowledge that the mouse is three feet from a four foot high flagpole on which the owl is perched, together with his knowledge of the Pythagorean Theorem. Yet, the fact that the mouse is five feet from the owl needn’t be part of the best explanation for why Lehrer has the evidence he does in the example regarding the distance between the mouse and the pole and the height of the pole.

One approach to accounting for such cases, advocated for some time by Kevin McCain (2014a, b), is to add a disjunct regarding entailment relations to the right-hand side of EXP as follows:

(EXP+ENT) A subject S’s evidence E supports a proposition p at a time t iff either (i) p is part of the best explanation B available to S at t for why S has E or (ii) p is available to S as an entailment of B.

However, Byerly and Martin (2015) argue that EXP+ENT cannot accommodate certain cases where a subject’s evidence supports a proposition by making it merely highly probable. For example, a golfer who has witnessed most but not all of his puts in similar circumstances go in may thereby have evidence supporting the claim that his current put will go in. This needn’t be because his current put’s going in explains why he has the evidence he currently does, nor because it’s going in is entailed by the best available explanation of his evidence.

McCain (2015) appears prepared to grant that EXP+ENT is unable to adequately account for such examples. In its place, he has advocated a different refinement of EXP that he argues can account both for cases in which entailment relations seems to contribute to evidential support and for cases in which probabilistic relations seem to. This newer refinement, which results in a view of epistemic justification quite similar to Poston’s and Harman’s, exclusively utilises explanatory relations:

(EXP+EXP) A subject S’s evidence E supports a proposition p at a time t iff either (i) p is part of the best explanation B available to S at t for why S has E or (ii) p is available to S as an explanatory consequence of B.

EXP+EXP accounts for the golf case because part of the best available explanation for the golfer’s evidence is that the ball he has just putted is rolling toward a cup in some circumstances C, and most balls rolling toward a cup in circumstances C go in; yet these propositions together explanatorily predict that the ball just putted will go in. They would explain its going in better than they would explain its not going in.

 Byerly and Martin (2016) argue against EXP+EXP, however, on the grounds that it cannot account for Lehrer’s case and for parallel cases involving probabilistic relations without countenancing symmetric explanations. For example, they ask us to consider a case in which a subject has <most years between 1999 and 2009 where Nicholas Cage appeared in at least 2 films were years between 1999 and 2009 where there were at least 98 drownings, and vice versa> and <in 2006 Cage appeared in at least 2 films> as part of the best available explanation for her evidence, suggesting that in such a case her evidence would support <in 2006 there were at least 98 drownings>. The explanationist should not attempt to account for this case by claiming that <in 2006 there were at least 98 drownings> is an explanatory consequence of the other two propositions. For, the consistent application of this strategy will lead the explanationist to embrace symmetric explanations, which seems a significant theoretical cost. To see this, simply alter the case so that the subject has <in 2006 there were at least 98 drownings> and <most years between 1999 and 2009 where Nicholas Cage appeared in at least 2 films were years between 1999 and 2009 where there were at least 98 drownings, and vice versa> as part of the best available explanation of her evidence instead. Consistent application of the proposed strategy would require claiming here that <in 2006 Cage appeared in at least 2 films> is an explanatory consequence of the other two propositions. But this will imply that the number of Cage films in 2006 partially explains the number of drownings, and the number of drownings partially explains the number of Cage films, thereby committing the explanationist to symmetric explanations. In McCain’s (2017) recent discussion of this objection, he appears to be sympathetic with applying the strategy proposed here, but offers no comments about how this strategy can be applied consistently without embracing symmetric explanations.

 Objections have also been raised against the sufficiency condition of EXP and similar principles. For starters, one might be worried by the problem of the bad lot. If p is part of the best explanation B available to S for why S has E, yet B is nonetheless a bad explanation, it would appear S is not justified in believing p, contrary to all of the versions of explanationist evidentialism we have thus far considered. Of course, a simple fix to these views may suffice: just require that in addition to being the best explanation, B is also a sufficiently good explanation (cf. McCain 2015: 339, n.19).

 Byerly and Martin (2015) argue that this fix is not enough. For, there can be cases in which S has available an explanation B for her evidence that is both the best available and a good explanation, yet S shouldn’t believe B because S also has reason to think that evidence she has not yet investigated may favor an alternative explanation. For example, a detective may have identified a suspect mid-way through her inquiry who is a good suspect and the best currently available, and yet have reason to think that the real perpetrator may emerge only after investigating further evidence, as similar occurrences have not been uncommon in the past. As the exchange between McCain (2015, 2017) and Byerly and Martin (2016) and illuminates, explanationists may differ with regard to their weighting of explanatory virtues, yielding different results regarding whether the subjects in such cases are justified. Yet, there may remain a further question raised by these cases about the relationship between explanationism and pragmatic encroachment, since it may appear that the stakes involved in the detective case make a difference for our epistemic evaluation of the detective. There seem to be two options worth exploring for explanationists regarding this question. They might claim that practical interests make no difference to epistemic justification as they are conceiving of it. But then a challenge is to identify more carefully the theoretical role played by justification. Plausibly they could not identify epistemic justification with epistemic obligation, as Conee and Feldman (1985: 19; cf. Feldman 2000) have wanted to, since it seems too strong to conclude that the detective *should* believe the suspect committed the crime, and this is partially because of the stakes of the inquiry. On the other hand, explanationists might argue that part of what it takes for an explanation to be *sufficiently* good is determined by practical interests. Such a version of explanationism may make an interesting addition to the literature, even if it runs counter to most contemporary evidentialists’ resistance to pragmatic encroachment.

 A final objection to the sufficiency of explantionism targets clause (ii) of EXP+EXP. Appley and Stoutenburg (2017) argue that, given the fact that not all explanatory relations are entailment relations, propositions justified by clause (ii) can have lower epistemic probability than propositions justified by clause (i). But, they argue, this creates a dilemma for the explanationist. Either the minimal degree of goodness in the explanations referenced in clause (i) is *just above* the threshold for justification, or it is more than just above that threshold. If it is just above the threshold, then there will be propositions that clause (ii) judges justified which fall below the threshold. If it is more than just above the threshold, then clause (i) will fail to count as justified propositions that are just above the threshold. I propose, however, that the explanationist can split the horns of the dilemma by requiring that the minimal degree of goodness for the explanations referenced in clause (i) is just above the threshold for justification, and that propositions justified by clause (ii) are sufficiently well explained by an explanation referenced in clause (i) that is sufficiently good that the resulting epistemic probability of the relevant propositions has a minimal level of being just above the threshold for justification. This solution does require a modification of the versions of explanationism thus far discussed.

 This brief review reveals that explanationist approaches to evidential support have proven resilient in the face of objections, even if this resilience requires modification to how explanationism is formulated. Perhaps the most threatening objection is the objection from Byerly and Martin which aims to show that explanatory relations cannot do all of the supporting work that entailment and probabilistic relations appear to do, since the former cannot be symmetric while the latter can.

1. Probabilistic Approaches

Given the vulnerability of explanationist approaches in certain cases where evidential support appears to involve probabilistic rather than explanatory relations, we might consider approaches to accounting for the evidential support relation in terms of probabilistic relations. Such approaches would make evidence’s support of a proposition a function of the probability of that proposition given that evidence. Accounts of this type could be formulated as follows:

(PR) A subject S’s evidence E supports a proposition p at a time t iff Pr(p│E) > n & F.

Different probabilistic accounts of evidential support may differ regarding their interpretation of the kind of probability in view—i.e., their interpretation of “Pr.” They may also differ with respect to the threshold value of n. And they may differ with respect to what else is required for E to support p beyond having a value greater than n for Pr(p│E)—i.e., they may differ regarding the conjunct F.

 I will discuss two proposals of this kind here, each inspired by influential work in the epistemology of inductive inference. Each of the proposals I will discuss was originally intended at most to account for inferential justification—justification for a proposition p which derives from the justification of other propositions. To yield a complete account of epistemic justification, these proposals must either be combined with the claim that there is no non-inferential justification, or they must be extended to account for non-inferential justification in addition to inferential justification. Here I will concentrate on the later possibility.

 The first probabilistic account I will call a “Carnapian” account after the philosopher Rudolf Carnap (1962). One of the hallmarks of Carnap’s approach to inductive logic and inferential justification was to interpret “Pr” as on objective—indeed, a priori—relation between E and p. The aim of his logical theory of probability was to account for the probability, in this sense, of any proposition p given any proposition q. Such an account would straightforwardly yield an account of the confirmation that any proposition provides to any other. It could also be employed to account for properties of epistemological significance: the epistemic status of a proposition p for a person S would be a function of the objective probability of p on S’s evidence.

 As suggested, Carnap’s theory was only intended to account for the confirmation that one proposition provides to another, and by extension the justification that one proposition provides to another. As such, it seems most suited to account only for inferential justification. However, we might imagine an extension of Carnap’s basic approach intended to account for non-inferential justification as well. For sake of simplicity, we can grant (as Conee and Feldman 2008 affirm) that non-inferential justification derives from a subject’s experiences. We then simply need a way to represent a subject’s experiences as part of E within PR. A simple suggestion would be to represent any subject S’s experience e with the proposition that S is having experience e. We could then further stipulate that E includes only propositions which are supported or which represent S’s experiences. With these modifications, Carnap’s approach can yield a thoroughly probabilistic approach to accounting for evidential support.

 One objection to this kind of Carnapian view is voiced by Conee and Feldman in their consideration of views which make evidential support a matter of an objective probabilistic relation between a subject’s evidence and a proposition. They write, “Where this probabilistic relation is beyond the person’s understanding, the person may not be justified to any degree in believing a proposition made probable by the evidence” (2008: 95). Whether a priori or not, it may be that the value of Pr(p│E) is beyond a person’s understanding; and if so, then the fact that it is above n will not imply that her evidence supports p. In embracing this objection, Conee and Feldman may be motivated by sympathy with a key motivating idea of internalism about justification—that a proposition cannot be justified for a subject if from that subject’s own perspective it would come as a surprise that p is true (Bonjour 1985).

 Carnap in fact has a reply to this subject’s perspective objection. For, in his view, the crucial element of F is a bridge principle connecting Pr(p│E) to properties of epistemological significance. According to Carnap (1962: 201), the fact that Pr(p│E) = n will only justify S in having a degree of belief of n in p if S also *knows* E (and nothing else) and *knows* that Pr(p│E) = n. Thus, it is not his view that a person’s evidence supports just any proposition that it makes sufficiently probable.

 Of course, the precise bridge principle proposed by Carnap will not do if we want PR to yield a complete account of evidential support. For, this principle references the subject’s *knowledge* of the value of Pr(p│E), which will presumably require that the subject has *support* for thinking that Pr(p│E) has this value. To yield a complete account of evidential support without succumbing to the subject’s perspective objection, the Carnapian will need to identify a relation between a subject and the fact that Pr(p│E) > n which will render p expectable to the subject without requiring unanalysed facts regarding what the subject’s evidence supports. One approach would be for Carnapians to model their approach to identifying a suitable relation on explanationist proposals regarding availability. For example, rather than proposing that S must be disposed to have a seeming that p is an *explanatory* consequence of E (cf. McCain 2014), the Carnapian might propose that S must be disposed to have a seeming that Pr(p│E) > n. I will return to this topic below in discussing psychologistic accounts of support.

 A different, and more forceful objection to Carnapian views is simply that there is no such thing as Pr(p│E) as the Carnapian conceives of it. In particular, there is no objective probabilistic relation such that for any propositions p and q, there is a value n such that necessarily Pr(p│q) = n. There is no objective probabilistic relation such that, for example, it is necessarily true that the probability that there is a red ball given that John is having an experience as of a red ball is equals n. Most philosophers have given up on Carnapian approaches to confirmation in light of this difficulty (Crupi 2015: 3.2), though these approaches do continue to be explored by some (e.g., Maher 2010).

 A second probabilistic approach embraces an interpretation of “Pr” likely to yield less scepticism regarding the existence of the relevant probabilistic relations. I will call this approach “Bayesianism” because it borrows salient elements from Bayesian approaches to formal epistemology. However, it should be clear that I am here attempting to bridge between Bayesian approaches as they are typically presented and the topic of this essay, which is typically not addressed by these views (cf. Hajek and Lin 2017, who advocate such bridge work). The Bayesian view I have in mind here interprets “Pr” as the subject’s own probability function. So, in requiring that Pr(p│E) > n, PR is interpreted as requiring that S’s own probability for p given E is greater than n. While there is controversy regarding exactly what such subjective probabilities are supposed to be, it is a common view that they are basic features of the subject (see Eriksson and Hájek 2007). We might, for example, think of Pr(p│E) as a measure of how strongly disposed S is to affirm p given that S has E.

 Because on this view Pr(p│E) is already a kind of bridge connecting the subject to the relationship between E and p, it may be that no bridge principle analogous to Carnap’s is needed to escape the subject’s perspective objection. If not, we may ask what will be included in F instead? It will differ from one Bayesian to another, but a common minimal requirement for rationality proposed by Bayesians is that the subject’s probability assignments obey the Kolmogorov axioms and a conditionalization principle, such as Jeffrey’s (2004) principle of conditionalization. F, then, may imply that so long as S’s probability assignments obey these and perhaps some further requirements, S’s evidence E supports p iff Pr(p│E) > n. Just as with the Carnapian view, if we wish for this Bayesian view to accommodate both inferential and non-inferential justification, we may stipulate that any subject S’s experience e may be represented within E as the proposition that S is having experience e, and we may stipulate that E includes only propositions which are supported or which represent S’s experiences.

 Two objections to Bayesianism so described are worth discussing for our purposes. On the one hand, even the minimal requirements of most Bayesian views—that agents’ probability assignments obey the Kolmogorov axioms and a principle of conditionalization—are regularly violated by people (Kahneman et al 1982). Yet, it would seem that even for such people, it is not the case that their evidence supports nothing. The difficulty is to see how a Bayesian view could be developed which could account for what such people’s evidence supports without sacrificing the impressive results of Bayesianism, which appear to depend upon these minimal stipulations.

 A second objection pushes in the opposite direction, charging the Bayesian approach with being too permissive regarding what is required of a subject’s prior probability assignments in order for her evidence to support a proposition. Even so-called “Objective” Bayesian views, which require further constraints on rationality beyond those identified above, remain very permissive regarding prior probability assignments. As Weisberg (2011) has noted, for example, the most popular Objective Bayesian constraints still permit one subject to assign a prior probability of 99/100 to a fair coin’s landing heads and another subject to assign 1/100.

 One form this latter objection can take that is of special interest in the present context is when advocates of an alternative approach to evidential support argue that their approach can solve this problem of the priors. This charge has recently been made by defenders of explanationism (e.g., Poston 2014). For example, while the Objective Bayesian may be quite permissive regarding what is required of a subject S’s prior probability assignments to Pr(there is a red object│S is having an experience as of a red object), the explanationist would plausibly require a probability assignment greater than n for a typical subject. So might an advocate of an approach to evidential support that employs intellectual virtues.

 Of course, one direction that could be taken in response to this kind of objection would be to combine Bayesianism with an alternative view, where the role of the latter is especially to account of non-inferential justification. However, this manoeuvre may not satisfy critics if they think their account of evidential support not only solves the problem of the priors, but also accounts for inferential justification just as well as Bayesianism. This has been precisely the position of some recent defenders of explanationism (e.g., Poston 2014), and we might imagine a similar contention being made by advocates of an account of evidential support appealing to intellectual virtues.

1. Psychologistic Accounts

Both explanationist and probabilistic accounts surveyed thus far have required that for a subject S’s evidence E to support p, S must “grasp the connection” (in a non-factive sense) between E and p, as Conee and Feldman (2008: 85) put it. This requirement, we’ve seen, can be motivated by the subject’s perspective objection. “Grasping the connection” here consists in a psychological state of the subject, such as her being disposed to have a seeming that p explains E, or a seeming that E makes p probable. While these requirements are only part of the story of support according to the accounts surveyed thus far, we might consider whether an account of support could be defended which was defined exhaustively in terms of such psychological states.

 One persistent objection to accounts of support that incorporate these kinds of psychological requirements is that they overintellectualize support. Bayesian critics of explanationism, for example, have argued that in cases where S’s evidence E makes probable p because p explains E, and S appropriately grasps that E makes p probable, it makes no further contribution to the epistemic status of p if S *also* grasps that p explains E (see Roche and Sober 2013; McCain and Poston 2017). A similar objection could perhaps be pressed in the opposite direction if, in such a case, the subject appropriately grasped that p explained E but not that E made p sufficiently probable.

 Opting for a more liberal view, one might propose that S’s evidence E supports p just in case S has (or is disposed to have) a seeming that E is appropriately probabilistically related to p *or* that E is appropriately explanatorily related to p (cf. Conee and Feldman 2008: 96). Yet, at least three objections afflict such a proposal. First, it is unclear what normative motivation there would be for requiring the content of the grasping psychological state to include probabilistic or explanatory relations between E and p when no such probabilistic or explanatory relations are required between E and p for E to support p. Second, the charge of overintellectualism still retains force. For, plausibly, such a view requires that for any subject to be justified in believing a claim, she must be sophisticated enough to distinguish between her evidential states and what they represent, and to be capable of conceptualizing probabilistic or explanatory relations between the two—both no mean feat. Third, there is some reason for scepticism regarding the existence of the particular kind of psychological state—seemings—required by this proposal (see, e.g., Byerly 2012).

 Jonathan Kvanvig (2014) has recently defended a view which incorporates a significant psychologistic element of the relevant kind but which avoids these three charges. For Kvanvig, psychological states regarding the evidential connection between E and p are only to be expected among the reflective, and make a difference for evidential support only for the reflective. Kvanvig’s basic idea is that, upon reflection, a person can give himself rules for how to evaluate the support that evidence provides to propositions. Kvanvig then embraces a Kantian account of why following such self-generated rules could make a difference for epistemic normativity, when the rules meet certain requirements. Kvanvig’s account, then, is motivated by a more general account of normativity, avoids overintellectualizing support, and avoids commitment to the existence of seemings.

 It should be noted, however, that Kvanvig’s account is not a thoroughly psychologistic account. For, while his account of justification for the reflective incorporates a grasping psychological state, his account of justification for the unreflective does not. Instead, it appeals to Chisholm-like epistemic principles stating what particular items of evidence support. One concern with this approach, voiced by Conee and Feldman (2008: 97), is that it fails to provide a unifying story about why it is that particular items of evidence support what they support. Another concern is that, by not incorporating a psychologistic element of the kind in view in this section, the account remains vulnerable to the subject’s perspective objection in the case of the unreflective.

 A recent attempt to construct a thoroughly psychologistic account of evidential support that is motivated by normative theory, avoids overintellectualizing support, and does not require seeming states is Byerly’s (2014) dispositionalist evidentialism. Like other views surveyed here, it employs dispositions to avoid the subject’s perspective objection. But unlike the dispositions identified in these other views, Byerly’s dispositions do not require capacities to distinguish between evidence and what it supports, or capacities to conceptualize probabilistic or explanatory relations. Like Kvanvig and others, Byerly distinguishes between different sub-types of a relevant epistemic property—here, justification—reflecting different levels of agentic involvement. One type of justification specifies requirements for fulfilling one’s role as a believer (which requires less agentic involvement), while the other specifies requirements for fulfilling this role with excellence (which requires more). Viewing each type of justification as valuable is motivated by a broader Aristotelian conception of normativity. For Byerly, S’s evidence E supports p, and so provides the first sort of justification for p, just when S is disposed in light of E to believe p. S’s evidence provides justification of the second sort for p just when S is disposed to believe p by virtue of a virtuous disposition.

If we think of a subject’s disposition to believe p in light of E as analogous to a subject’s probability for p given E, then Byerly’s view shares much in common with the Bayesian views discussed above. Indeed, like these views, Byerly’s is quite permissive regarding one type of justification—even more permissive than these Bayesian views, since it doesn’t require the subject’s dispositions to obey the Kolmogorov axioms, for example. Yet Byerly also recognizes a more demanding type of justification, which he attempts to account for by proposing a synthesis of evidentialism and virtue epistemology, as others have (e.g., Baehr 2011, Cloos 2015).

One challenge for this type of synthesis of evidentialism and virtue epistemology is to specify the relationship between intellectual virtue and explanatory and probabilistic reasoning. Advocates of these syntheses should want to contend that cogent explanatory and probabilistic reasoning is reflective of intellectual virtue. In this way, their accounts can explain the presence of justification in the golf case or the Cage films/drowning case. Yet they should also want to contend that cogent explanatory or probabilistic reasoning is not all there is to intellectual virtue. Doing so may help with the detective case and others like it, and is essential for differentiating these syntheses from rival explanationist and probabilistic accounts of support. Whether these contentions can be defended in detail is yet to be seen.

References

Appley, Bryan and Gregory Stoutenburg. 2017. “Two New Objecctions to Explanationism.” *Synthese* 194, 8: 3069-84.

Baehr, Jason. 2011. *The Inquiring Mind: On Intellectual Virtues and Virtue Epistemology*. Oxford University Press.

BonJour, Laurence. 1985. *The Structure of Empirical Knowledge*. Harvard University Press.

Byerly, T. Ryan and Kraig Martin. 2015. “Problems for Explanationism on Both Sides.” *Erkenntnis* 80, 4: 773-91.

Byerly, T. Ryan and Kraig Martin. 2016. “Explanationism, Super-Explanationism, Ecclectic Explanationism: Persistent Problems on Both Sides.” *Logos & Episteme* 7, 2: 201-13.

Byerly, T. Ryan. 2012. “It Seems Like There aren’t Any Seemings.” *Philosophia* 40, 4: 771-82.

Byerly, T. Ryan. 2014. “A Dispositional Internalist Evidentialist Virtue Epistemology.” *Logos & Episteme* 5, 4: 399-424.

Carnap, Rudolf. 1962. *Logical Foundations of Probability*. University of Chicago Press.

Cloos, Christopher. 2015. “Responsibilist Evidentialism.” *Philosophical Studies* 172, 11: 2999-3016.

Conee, Earl and Richard Feldman. 1985. “Evidentialism.” *Philosophical Studies* 48, 1: 15-34.

Conee, Earl and Richard Feldman. 2008. “Evidence.” In *Epistemology: New Essays*, ed. Quentin Smith, 83-104. Oxford University Press.

Crupi, Vincenzo. 2015. “Confirmation.” In *Stanford Encyclopedia of Philosophy*, ed. Edward Zalta. Available at https://plato.stanford.edu/entries/confirmation/

Eriksson, Lina and Alan Hájek. 2007. “What are Degrees of Belief?” *Studia Logica* 86, 2: 185-215.

Feldman, Richard. 2000. “The Ethics of Belief.” *Philosophy and Phenomenological Research* 60, 3: 667-95.

Hájek, Alan and Hanti Lin. 2017. “A Tale of Two Epistemologies?” *Res Philosophica* 94, 2: 207-32.

Harman, Gilbert. 1986. *Thought*. Princeton University Press.

Jeffrey, Richard. 2004. *Subjective Probability: The Real Thing*. Cambridge University Press.

Kahneman, Daniel, Paul Slovic, and Amos Tversky, eds. 1982. *Judgment Under Uncertainty: Heuristics and Biases*. Cambridge University Press.

Kvanvig, Jonathan. 2014. *Rationality and Reflection: How to Think about What to Think*. Oxford University Press.

Lehrer, Keith. 1974. *Knowledge*. Clarendon Press.

Lycan, William. 1988. *Judgment and Justification.* Cambridge University Press.

Maher, Patrick. 2010. “Explication of Inductive Probability.” *Journal of Philosophical Logic* 39, 6: 593-616.

McCain, Kevin and Ted Poston. 2017. “The Evidential Impact of Explanatory Considerations.” In *Best Explanations: New Essays on Inference to the Best Explanation*, 121-31. Oxford University Press.

McCain, Kevin. 2014a. *Evidentialism and Epistemic Justification*. Routledge.

McCain, Kevin. 2014b. “Evidentialism, Explanationism, and Beliefs about the Future.” *Erkenntnis* 79, 1: 99-109.

McCain, Kevin. 2015. “Explanationism: Defended on All Sides.” *Logos & Episteme* 6, 3: 333-49.

McCain, Kevin. 2017. “Undaunted Explanationism.” *Logos & Episteme* 8, 1: 117-27.

Moser, Paul. 1989. *Knowledge and Evidence*. Cambridge University Press.

Poston, Ted. 2014. *Reason and Explanation: A Defense of Explanatory Coherentism*. Palgrave Macmillan.

Roche, William and Elliot Sober. 2013. “Explanatoriness is Evidentially Irrelevant, or Inference to the Best Explanation Meets Bayesian Confirmation Theory.” *Analysis* 73, 4: 659-68.

Weisberg, Jonathan. 2011. “Varieties of Bayesianism.” In *Handbook of the History of Logic, Volume 10*, ed. Dov Gabbay, Stephan Hartmann, and John Woods, 477-552. North Holland.