

EVIDENCE AND EMOTIONS

The Problem of Propositional Justification

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ABSTRACT This paper explores one way in which the view that emotions can be epistemically justified stands in tension with two common views in epistemology; namely, that doxastic justification entails propositional justification, and that propositional justification is entirely determined by the (inferential) support relations between one's evidence and a given proposition. A tentative solution to the tension is provided.

KEYWORDS evidence, emotions, justification, probabilism, hope

I. INTRODUCTION

The following three initially plausible and widely accepted assumptions seem to stand in tension. The first is that doxastic justification entails propositional justification. Epistemic justification comes in two specific sorts: propositional and doxastic/attitudinal. While S having propositional justification doesn't entail S having doxastic/attitudinal justification, S having doxastic/attitudinal justification (i.e., S having an epistemically justified attitude that p) entails S having propositional justification. For instance, it is possible for one to be epistemically justified *to* believe that the butler did it, without believing that the butler did it or without basing one's belief that the butler did it on the right grounds, say, evidence, for the claim that the butler did it (*propositional justification*). But whenever one has justified belief (doxastic justification), one also has propositional justification (i.e., is justified to believe that p). The second

assumption is that whether one is (propositionally) justified to have an attitude with p as its content depends entirely on the quality (soundness) of the (inferential) relations between propositions. More specifically, it depends on the relation between one's grounds/evidence E for p and p (*propositional justification as a relation between propositions*). The third assumption is that states other than beliefs can also be epistemically justified. For instance, one's hope that it won't rain today can be epistemically justified or epistemically unjustified. One checks the weather forecast, and it says it won't rain. One is justified to hope it is not raining. But if one is outside and sees that it is raining heavily and there is no sign of the rain going away, one is not epistemically justified to hope that it is not raining. Of course, this assumption doesn't entail that all the attitudes need to have the same standards for justification, for example, one's hope that one's favorite team will win

might need less evidence in its support to be justified than one's belief that one's favorite team will win.

That the three assumptions stand in tension can be observed in cases where one has an epistemically justified attitude that is not belief, for example, hope that *p*, while one is intuitively not justified to believe that *p*. In such cases the assumptions seem to lead to the conclusion that the inferential relation between one's evidence/grounds and *p* is both good/sound and not good/sound. If one's attitude of hope that one's team will win is epistemically (attitudinally) justified (the third assumption), then by the first assumption, one is also propositionally justified in hoping that one's team will win, and by the second assumption the inferential relation between one's evidence and *p* is good/sound. Yet, given that one is not propositionally justified to believe that *p*, the second assumption implies that the inferential relation between one's evidence and *p* is not good/sound enough. Thus, we arrive at the result that the inferential relation between one's evidence and *p* is both good/sound and not good/sound at the same time. Assuming that a given inferential relation between evidence and propositions cannot be both good/sound and not good/sound at the same time, we seem to arrive at a contradiction in cases where one's hope that *p* is justified but one is not justified to believe that *p*. How should we avoid the contradiction?

In what follows I will clarify and elaborate the tension introduced above, and I will show that it raises a problem for one popular view within the epistemology of emotions.

2. EMOTIONAL JUSTIFICATION AND FURTHER CLARIFICATIONS

According to one popular view, emotions (e.g., fear, hope, joy, being elated) can be assessed from a number of different perspectives. One distinct way of evaluating, say, someone's being angry at a friend is

to assess his anger from a purely epistemic point of view (cf. Gordon 1987; Greenspan 1988; Mulligan 1998; Goldie 2002, 2004; Deonna and Teroni 2012; Scarantino and de Sousa 2018; Echeverri 2019; Meylan 2018; Epley 2019; Drucker 2020; Na'aman 2021). If he doesn't know that his friend revealed his secret to the public (but, say, he merely confabulates that he did it in an episode of paranoia) then whatever else we can say about his emotion of being angry it seems reasonable to conclude that from the purely epistemic point of view his anger is somewhat problematic. We can admit that the subject is right in another sense of being angry because let's suppose—in an unexpected turn of events—it happens to be the case that his friend did reveal the secret unbeknownst to him after all. But this dimension of assessment is distinct from the epistemic one. His anger is epistemically deficient or inappropriate in a way to be specified.

A standard way of putting this general thought of the possibility of assessing emotions from the epistemic point of view in more specific terms is to say that emotions can be *epistemically* justified. According to this line of thought emotions can be epistemically justified in a parallel way to beliefs. Let us call this view Justified Belief–Justified Emotion Parallelism (or *Parallelism* for short). A clear example of this way of understanding the general idea that emotions can be evaluated on the basis of their epistemic aspects can be found, for instance, in a recent paper by Santiago Echeverri:

If Pat's fear that terrorists will attack New York City is based on CIA intelligence reports, her fear is justified. If Peter is jealous of his wife on the basis of a mere hunch, his jealousy is unjustified. If Youna has heard from a reliable witness that her father is in better health, she is justified in being elated. (Echeverri 2019, p. 541)

A couple of considerations speak in favor of the parallelism. First, exactly as in the case of belief, emotions are (typically) held

for reasons. Some of these reasons are good (normative reasons) and some are bad (on the mere basis of one's emotions). That my team just won the game is a reason for me to be happy; it is a good reason in the sense that it speaks in favor of being happy. That my team just won the game is a bad reason for me to be angry since their winning doesn't support an instance of anger (at least in a typical case). Given that both beliefs and emotions are held on the basis of reasons and some of these are genuine good (normative) reasons, exactly as in the case of belief, and given that the possession of reasons for belief is taken to be what makes a belief justified, one might think that emotions can also be epistemically justified. If reasons justify belief and there are reasons (of the same sort) for emotions, then it is natural to think that emotions can be justified. Second, more generally one might think that belief and emotions are similar in important aspects. Both are attitudes with intentional objects (e.g., one is angry *at* someone or *about* something, and one believes *something*). Both have a cognitive element. Of course, emotions need not be beliefs in disguise to have this element. It may merely consist in them being essentially based on some cognitive state (e.g., cognitive basis; see below). But both emotions and beliefs involve a dimension of assessment of the situation and this dimension seems to be cognitive and subject to the norms of justification. Thus one might conclude that emotions as well as beliefs can be epistemically justified (see Deonna and Teroni 2012 for more detailed considerations).

Another clarification concerns the very nature of emotions. What do we mean by emotions here? It is widely agreed nowadays (in cognitive/affective sciences) that there are at least five central characteristics of emotions (see Epley 2019, based on Moors 2009; also Scarantino and de Sousa 2018). Let us list these briefly. (1) Emotions have a dimension of appraisal/evaluation. It is essential for

emotions to have a (broad) cognition-style state (e.g., perceptions) “which determines the situation to be emotionally relevant and how” (see Epley 2019, p. 270); (2) A second dimension concerns bodily changes. Emotions involve changes in the autonomic nervous system, the motor system, and the endocrine system; (3) Emotions involve action tendencies. It is another aspect of emotions that they involve undergoing preparations to respond (to the situation); (4) Another aspect is that emotions initiate further cognition. Having an emotion involves undergoing “emotion-relevant attention biases and emotion-congruent thinking” (see Epley 2019, p. 270); (5) Finally, emotions seem to have dedicated feelings/phenomenology. When we undergo an emotion we have felt experiences of the above components.¹

Philosophers typically propose further characterization of emotions by providing somewhat more fine-grained constraints on the above points. Let us call the set of common assumptions in philosophy of emotions the Standard Package. It contains the following points: (i) emotions have to have *intentionality*. Emotions, contrary to moods (e.g., melancholy) and affects (e.g., warm feeling) are *about* something (or someone), for example, fear *of* the Bulldog (intentional object); (ii) Emotions have *cognitive bases*. Mental states and processes (e.g., perceptions, visual experiences, thoughts) give ‘access’ to intentional objects of emotions (see Deonna and Teroni 2012, p. 5). And more specifically, they give access to certain non-evaluative properties that these objects possess. Cognitive bases are “subject-matter givers of emotions” (see Echeverri 2019); (iii) Emotions have *formal objects*, where formal objects are to be understood as inherent standards of appropriateness (sometimes associated with core relational themes; see Lazarus 1991; Scarantino and de Sousa 2018). See de Sousa (2002, p. 251): “The formal object of fear—the norm defined

by fear for its own appropriateness—is the Dangerous”; (iv) Closely connected to the formal objects is the fact that emotions have *fittingness/correctness* conditions. Formal objects enable us to distinguish but also to evaluate emotions in a sense. An emotion is *fitting* (appropriate, correct) just in case it meets its formal object. More specifically, an episode of emotion E is fitting just in case “its intentional object *o* exemplifies the formal object that E (re)presents *o* as having” (Echeverri 2019, p. 543); (v) Emotions also have *other dimensions of assessment*. Fittingness is not moral or prudential appropriateness of emotions (see D’Arms and Jacobson 2000). Perhaps there can be a funny but immoral joke. Crucially for us we can distinguish fittingness from purely epistemic appropriateness of emotions. Fittingness of an emotion is not epistemic appropriateness (see Gordon 1987, p. 35 among others). Deonna and Teroni sum up this point nicely:

[S]tandards of correctness so conceived should be distinguished from epistemological standards by which we assess the justification of emotions. Indeed, emotions are often assessed as justified or unjustified in light of the reasons the subject has for them. Bernard has good reasons to be elated if he has just heard from a reliable witness that his wife is in much better health. His reasons would be bad were his elation based on a report from a notoriously unreliable witness. In short, our emotions are sometimes justified, and sometimes unjustified. And they can be unjustified even if, by chance perhaps, they meet the standard of correctness just mentioned. (Deonna and Teroni, 2012, pp. 6–7)

Robert Gordon seems to put the same point in terms of there being two different kinds of reasons for emotions: *attitudinal* (connected to formal objects) reasons vs. *purely epistemic* (connected to epistemic justification) reasons.²

Philosophy of emotions is an increasingly popular and active field today. Scarantino

and de Sousa (2018) note that there are at least nine distinct *philosophical* theories of emotions on the market (and there are even more variations in the affective sciences more generally). Here we are not even attempting to sum up various philosophical theories of emotions. Our focus is elsewhere. Our focus is on the very last point: that emotions can be assessed from an epistemic point of view. Philosophers who recognize the specifically epistemic dimension in the assessment of emotions typically take on board not merely this general and pre-theoretically plausible point, but also assume more specifically a version of parallelism. They suggest that emotions can be appropriate from an epistemic point of view, and more specifically that emotions can be *epistemically justified*. The assumption here is that the property of epistemic justification in the case of emotions and in the case of beliefs is of the same kind. Deonna and Teroni provide a prominent example of parallelism:

[Awareness Parallelism]

An emotion is justified if, and only if, in the situation in which the subject finds herself, the properties she is (or seems to be) aware of and on which her emotion is based constitute (or would constitute) an exemplification of the evaluative property that features in the correctness conditions [formal object] of the emotion she undergoes. (Deonna and Teroni 2012, p. 97)

See also Goldie (2004, p. 98) for an account along similar lines. The version of parallelism in Awareness Parallelism appeals to specific conditions that need to obtain in order for one to have epistemic justification for emotions. It appeals to the awareness condition. Our focus in what follows is not specifically on this version of parallelism, yet it might have to have a concrete example of the approach on the table. The specific awareness condition of this version can be questioned (see Echeverri 2019). And, of course, its counterpart for the justification of beliefs would be controversial.

For it is not clear at all that one should be aware that a proposition is true, or seems to be true, in order to be justified to believe it (assuming that the correctness condition for belief is truth). But let's leave these worries aside for now. Our worry concerns the basic assumption that both emotions and beliefs can be *epistemically justified* and that justification here is of exactly the same kind (if not quantity). If this is true, then this claim together with two other widely held assumptions in epistemology lead us into an inconsistent position. The two other assumptions are that doxastic/attitudinal justification entails propositional justification and that propositional justification is entirely determined by the (inferential) relations between one's evidence and the relevant propositions.

3. THE PROBLEM

In what follows we will assume an interpretation of the general idea that propositional justification is entirely determined by (inferential) relations between one's evidence and the relevant propositions in purely evidentialist terms. The relevant relation will be understood in terms of evidential support. Evidential support comes in two sorts. We have to distinguish between a *comparative form of 'support'* or a degree of support and a *positive form of 'support'* or outright support. The distinction follows naturally from standard assumptions in contemporary linguistics of gradable adjectives. Linguists typically distinguish between a positive form of a gradable adjective (e.g., *tall*, *rich*, *wet*, *pure*) and comparative forms of adjectives (e.g., *taller*, *richer*, *wetter*, *more pure*) (see Kennedy 1999, 2007, Kennedy and McNally 2005). We can think of comparative forms as introducing a scale and then telling us that the thing that is taller, richer, and so on, has a higher degree of the relevant property on the underlying scale. And we can think of the positive form as introducing a scale and a relevant threshold/endpoint on the scale and then

telling us that the relevant thing has reached the relevant threshold/endpoint. This framework has been recently applied to theorizing about evidential support (see Logins 2022). It can help to see how probabilistic conception of confirmation can be both appealing and misleading. Without going into further details about comparative evidential support and confirmation, the relevant point for us here (a point well known in philosophy of science) is that it makes sense to distinguish the question of whether a hypothesis is supported, that is, supported *tout court*, outright, from the question of whether a hypothesis is more supported than its alternatives (and to what degree the hypothesis is supported) (see Carnap 1962). The former is a question about the positive form of the support, while the latter is a question about specific degrees of support. So, for instance, one question is whether the hypothesis that Mary is pregnant given that the simple pregnancy test says so is more supported than the hypothesis that she is not, and quite a different question is whether the hypothesis that Mary is pregnant is supported *tout court*, given the results of the simple test. We can think, for instance, that the reply to the first is yes, but the reply to the second is no, given the high number of false positives of home pregnancy tests (a more thorough medical examination is needed to support outright or confirm the hypothesis). Now, of course, we expect that there are some bridge principles between the two sorts of support. So, for instance, we may reasonably expect that a hypothesis is supported given a body of evidence just in case the comparative support reaches some specific threshold. So, for instance, a proponent of the probabilistic approach to evidential support might expect that a hypothesis is supported outright given a body of evidence just in case the degree of support for the hypothesis given the relevant body of evidence reaches some threshold of probability (e.g., .75, .9, or, say, .99). With this in mind we can assume the following

general principle linking comparative support to positive support:

[Bridge Lockeanism about support]

A hypothesis H is supported outright given a body of evidence E for S iff the degree of support H has given E for $S > d$ (where d corresponds to some threshold or endpoint on the underlying scale of support).

For brevity of presentation let us assume a probabilistic approach to evidential support (it may well turn out that at the end of the day the simple probabilistic approach is not the correct one, see Achinstein 2001, pp. 69, Logins 2022, but this doesn't seem to affect the essence of the argument).

[Probabilism]

The degree of support that H has given E corresponds exactly to the degree of probability of H given E .

Assuming Bridge and Probabilism principles, we obtain Probabilistic Lockeanism about support:

[Probabilistic Lockeanism about support]

A hypothesis H is supported outright given a body of evidence E for S iff the probability of H given $E > d$, where d is some degree of probability (e.g., $P(H|E) > .75$).

Finally, let us assume a broad evidentialist framework of epistemic justification; that is, the idea that (any sort of) epistemic justification for one is determined or supervenes on one's evidence. Let us focus specifically on propositional justification. Here is the general, rough evidentialist thesis for belief.³

[Evidentialism]

S is epistemically justified to believe that p given S 's total evidence E iff S 's total evidence E (overall) supports outright p for S .

Now, if epistemic justification in belief and emotions is the same sort of property, then it is only natural to expect that the same general theory about justification should apply in the case of the justification of belief and in the

case of the justification of emotions. Putting this thought together with broad Evidentialism we obtain the idea that evidentialism should be the correct theory for justification of belief as well as the correct theory for epistemic justification of emotions. The resulting view here can be seen as a simple evidentialist version of parallelism:

[Naïve Evidentialist Parallelism]

S is epistemically justified to have emotion X that p given S 's total evidence E if and only if S 's evidence E supports outright p for S .

At present we have all the ingredients for deriving a contradiction.

[First Reductio]:

- (1) S is epistemically justified to believe that p given S 's total evidence E iff S 's evidence E supports outright p for S . [Evidentialism about belief]
- (2) S is epistemically justified to have emotion X that p given S 's total evidence iff S 's evidence E supports outright p for S . [Naïve Evidentialist Parallelism]
- (3) A hypothesis H is supported outright given a body of evidence E for S iff the probability of H given $E > d$, where d is some degree of probability (e.g., $P(H|E) > .75$). [Probabilistic Lockeanism about Support]
- (4) It is not the case that evidential probability that Manchester United will win given S 's evidence is greater than d ; for example, it's not the case that $P(\text{Manchester United win}|E) > d$ for S . [A case]
- (5) S is not epistemically justified to believe that Manchester United will win. [1, 3, 4]
- (6) S is epistemically justified to hope that Manchester United will win. [Assume]
- (7) H is supported outright given E for S . [2, 6]
- (8) H is not supported outright given E for S . [1, 5]

Premises (1)–(8) lead to a contradiction. Which premise should we reject? First, note that we have assumed a number of principles. Of course, we may conclude that the argument shows that these principles cannot be

maintained (e.g., Bridge, Evidentialism). While it is, of course, a possible move, it does come at the cost of being revisionary with respect to popular assumptions in epistemology. I think it is an assumption of philosophers of emotions that the claim that emotions can be epistemically justified is not to have such repercussions for specific assumptions in the domain of epistemology. Thus, I think that a proponent of parallelism should rather try other solutions to avoid contradiction. How about premise (4), a case, and an assumption in (6)? Well, again, giving up what seems to be an absolutely ordinary situation, and a commonsense assessment of it, represents a substantial cost for a theory of the epistemic propriety of emotions. There seems to be a multitude of more or less ordinary situations where the evidence we have in favor of a claim doesn't outright support it. And yet, it seems OK to have an emotional attitude towards it. While it is not the case that the hypothesis that Manchester United will win is outright supported given my evidence (say, they are one goal behind and there are only few minutes before the end of the game), I may nevertheless be justified in hoping or fearing, etc. that they will win. The evidence, so to say, doesn't render the hope inappropriate in such a case (compare to one's hoping that Manchester United will still win after the game is over). Thus, giving up (4) or (6) isn't really an option either.

4. RELATIVIZATION?

It seems then that if one wants to maintain a version of parallelism, one has to give up the naïve version thereof. That is, if one wants to maintain the idea that epistemic justification in belief and emotion are the same sort of property while also holding the other traditional assumptions about justification (doxastic justification entails propositional justification and propositional justification is determined by the evidential support relation), one should give up premise (2). After all

it is only a naïve version of a broadly evidentialist approach to the epistemic justification of emotions.

A natural move for a proponent in the light of the above reductio would be to assume that evidential support has to be *relativized*. That is, to claim that different standards for outright support obtain depending on whether the focus of the discussion is on emotion or on belief. Such a relativization would, of course, ensure that there is no contradiction in cases where the evidential situation of the subject warrants emotions but not beliefs; for example, the game case in (4). Strictly speaking, relativizing outright evidential support amounts to revising premises (1) and (3) as well. The idea here is that there is no plain outright support, but that outright support is always an outright support *with respect to* believing, hoping, fearing, and so on. This idea has to be integrated into our formulations of evidential support and evidentialism. The updated versions of (1), (2), and (3) should then include references to the relativization of outright evidential support. Here then are the updated premises.

[Relativized Support]

- (1*) S is epistemically justified to believe that p given S's total evidence E iff S's evidence E supports outright p for S with respect to believing that p. [Relativized Evidentialism about belief]
- (2*) S is epistemically justified to have emotion X that p given S's total evidence iff S's evidence E supports outright p for S with respect to having emotion X that p. [Relativized Evidentialist Parallelism]
- (3*) A hypothesis H is supported outright given a body of evidence E for S with respect to believing that p iff the probability of H given E > d*, where d* is some degree of probability (e.g., $P(H|E) > .75$). [Probabilistic Lockeanism about Support Relativized to Belief]
- (3'*) A hypothesis H is supported outright given a body of evidence E for S with respect to hoping/fearing that p iff the probability

of H given $E > d^{**}$, where d^{**} is some degree of probability (e.g., $P(H|E) > .5$).
[Probabilistic Lockeanism about Support Relativized to Hope/Fear]

Now, of course, given this modification of the relevant premises, there is no valid argument that would parallel the argument from (1)–(8). The contradiction is avoided, since it may well be the case that H is supported outright with respect to hoping that H , but not supported outright with respect to believing that H .

However, while such a move certainly can avoid contradiction from our simple reductio it is still problematic. For it would entail (given our assumptions about evidentialism and probabilism) that a piece of evidence cannot ever merely support a hypothesis. The evidential support and hence the degree of probability required for outright support will always be relative to the background assumption of whether the hypothesis in question is believed or merely feared, hoped for, and so on. Strictly speaking, the question “Does this piece of evidence outright support the hypothesis?” should not even make sense on this view. But it surely does. If the proposed relativization were on the right track one should conclude, for instance, that there is no evidence that climate change is occurring for someone who cannot have a belief or an emotion about climate change (let’s say a genuine Pyrrhonian). Yet, it seems that there can be evidence for a hypothesis for someone even though the subject in question cannot articulate/hold any belief or an emotion or other settled attitude about the hypothesis in question. To deny this commonsense assumption seems to lead to a very relativistic view of evidential support. Relativized parallelism ultimately leads to a radical relativism about evidential support. While this is not the place to evaluate relativism about evidential support in general, I think we can agree again that such a consequence is a cost for theories of emotions. Again, one might think that our

theory of the epistemic propriety of emotions need not lead us to rule out the orthodoxy in epistemology.

5. CONCLUDING REMARKS

The main aim of the present article is to introduce and clarify the tension between three individually plausible assumptions. The first is that doxastic (or attitudinal) justification entails propositional justification. The second is that propositional justification is entirely determined by the support relation, that is, the relation between a given set of evidence and the justified proposition. And the third claim is that attitudes beyond belief can be epistemically justified. We have shown that there are plausible perfectly ordinary situations where one’s emotional attitudes are epistemically justified, and yet one’s belief is not. If attitudinal justification entails propositional justification, then we arrive at a conclusion that a given proposition is both propositionally justified or supported and that it is not propositionally justified or supported. This is a worrying result since it seems to lead to a contradiction. We also explored what may appear to be a natural response to the above tension, namely, relativization of evidential support: the idea that a given set of evidence always (outright) supports a proposition relative to the attitude of believing or relative to another attitude, say, an emotion. We showed that this result is unsatisfactory since it appears to lead to a problematic form of relativism and it obliterates the very notion of (outright) evidential support for a proposition since, according to the relativized conception, one doesn’t have outright evidential support for a hypothesis in situations where one has no settled attitude or no intention/no way to have a settled attitude, be it a belief or an emotion.

What lesson should we take from the above discussion? My tentative suggestion at this point is that our best bet is to explore rejection of the standard view according to which

attitudinal justification entails propositional justification. If we deny this principle, we can insist that in cases where one is justified in having an emotion but not a belief, having the relevant attitude doesn't entail having propositional justification. If so, we can avoid the problematic conclusion that seems to lead to a contradiction. This move, of course, comes at great cost to the standard views in epistemology. Yet it may well represent the lesser cost compared to other theoretical options we have at this point. Moreover, denying this principle is not unprecedented in recent debates. Perhaps this would even allow us

to explore new and potentially interesting positions concerning the nature of epistemic justification.

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NOTES

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1. This five-element clarification relies heavily on Epley (2019), which is itself based on Moors (2009). For further details and discussion see these two, among others.
2. “[i] Tom is worried that his wife was on the two o'clock flight, because that's the one that was hijacked (attitudinal). [ii] Tom is worried that his wife was on the two o'clock flight, because she said she'd be arriving early in the evening (epistemic)” (Gordon 1987, p. 35).
3. Proponents of versions of evidentialism are too many to invoke. Let us work with an intuitive and rough version that many might be willing to accept.

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