

A Defense of the (Almost) Equal Weight View

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Often when there are disagreements, the parties to the dispute possess different evidence regarding the disputed matter. In such cases, rationality requires the disagreeing parties to take into account these differences in revising their beliefs. If it is known that one has important evidence the other lacks, it is uncontroversial that the party in the inferior evidential position should defer to the judgment of the party in the superior evidential position. If we disagree about what the weather is like in Calcutta in May, and you but not I have spent a lot of time in Calcutta in May, then that constitutes a reason for me to defer to your judgment. More generally, non-experts should defer to experts about matters within their area of expertise. This is straightforward.

Matters are considerably less clear when the parties to the dispute have the same evidence. Of course no two people ever share exactly the same evidence. But in many cases, there is enough shared evidence that there is no reason to suppose that either party to the dispute is in an evidentially superior position. In such a situation, what does rationality require of the disputants? The problem is complex because when the relevant evidence is shared, the opinion of each of the disputants counts as evidence that the other has reasoned incorrectly from the shared

evidence.

A special case of this problem arises when the parties to the dispute are in general equal in their reasoning abilities, or at least, close enough so there is no basis for supposing either party is in general the superior reasoner.¹ When parties to a disagreement have the same evidence and are equal in their reasoning abilities, they are epistemic peers.

What does rationality require when one discovers that one has an epistemic peer who disagrees about some matter? In his seminal paper, "Puzzles About Rational Disagreement" Richard Feldman cogently defends what has come to be called, "The Equal Weight View" (EW).² Several other writers have also defended the view in various forms. According to EW, there is an evidential symmetry in virtue of which each party to the dispute should give equal weight to his own and his peer's opinion.

I myself think EW, or something in the neighborhood, has to be correct. But in a recent paper, Tom Kelly develops an ingenious challenge to EW.³ Kelly argues that EW fails to take into account certain evidence that can create an evidential asymmetry in a peer disagreement. In such a situation, one peer should give extra weight to his own opinion. He proposes an alternative to EW he calls "The Total Evidence View" (TE). According to Kelly, TE properly takes into account all the evidence that plays a role in determining how one should revise, and in particular, the

¹ Of course relative reasoning abilities might depend on the subject matter.

² Feldman (2006).

³ Kelly (2010). All page references are to this work.

evidence that EW overlooks.

It is a truism that one should revise one's opinion by taking into account one's total evidence. The challenge for the EW proponent is not to show that one should in fact ignore the evidence in question. Rather the task for the EW proponent is to show that EW is consistent with this truism, i.e., that EW is itself a version of TE. This is the task I undertake in this paper.

My defense of EW will be hedged. I will fully defend the position that when one is at the rationally correct credence on one's evidence, one should give equal weight to one's peer's view. But for reasons raised by Kelly, matters are more complicated when one is not at the rationally correct credence on one's evidence. I will tentatively defend the view that EW applies even in these cases.

(I) EW and Symmetry

EW says I should give my peer's opinion the same weight I give my own. EW can seem quite plausible when one considers that our status as peers entails a symmetry between our epistemic positions. We have the same evidence, and we are equally good at reasoning from the evidence. Neither of us would seem to have any basis for favoring his own credence over his peer's. A familiar principle in ethics says that the mere fact that an action is mine rather than someone else's cannot be relevant to the moral status of the action. What holds for morality holds for (epistemic) rationality as well. The mere fact that it is

my opinion rather than my peer's cannot be relevant to the rational status of that opinion.

It seems to follow from EW that if I believe *h* and my peer believes *not-h*, we should each suspend judgment regarding *h*.⁴ Some have argued, against EW, that rationality permits me to remain steadfast in the face of peer disagreement and not revise my opinion.⁵ That may seem plausible to some (though not to me) when the problem is viewed within a binary belief framework. However, Kelly convincingly argues that to address the rational disagreement problem in full generality, we must formulate the problem in terms of graded belief (credences). For if I believe *h* and my peer suspends judgment concerning *h*, what does EW tell us to do? When the rational disagreement problem is formulated within a credence framework, the view that I can remain steadfast when confronted with peer disagreement is extremely implausible. Such a view would have it that when my peer disagrees with me, I need not make *any* change in my credence. This means either that my peer's disagreement is no evidence whatsoever against my credence, or that it is permissible, in some instances, to ignore evidence. Neither position is defensible. This means that the rational disagreement problem, within a credence framework, concerns not whether one should revise in the face of peer disagreement, but rather to what extent one should revise. EW says that rationality requires that each subject give equal weight to his and his peer's credence. This implies that when peers discover they disagree, each should adopt

⁴ Feldman (2006)

⁵ van Inwagen (1996), Plantinga (2000), and Rosen (2001)

the simple average of their credences, i.e., they should split the difference between their credences. If I am at .8 and my peer is at .2, then we should each move to .5.

There is however an important restriction on when one is required to give equal weight to one's peer's credence. By stipulation, my peer is someone who reasons as well as I *in general*. I can give less weight to his credence if I have grounds for thinking that in the particular circumstances of our disagreement, his reasoning is not up to the usual standards. I might also have grounds for thinking that my peer is being insincere which would also allow me not to give equal weight to his credence. But as Christensen and Elga, have argued, I cannot appeal to my own reasoning from the evidence for P as a basis for ignoring (or giving less weight to) my peer's credence.⁶ I cannot simply reason again from evidence to my credence and infer on that basis that my peer's credence is incorrect. Rather, if I am to ignore, or give less weight to my peer's credence, it must be on independent grounds. The justification for this is straightforward. As I noted, my peer's disagreement calls into question the correctness of my reasoning in support of my credence. This follows from our having the same evidence. Thus it would be irrational for me to appeal to that very reasoning as a basis for giving less weight to my peer's credence.

One way to see this is to note that if such reasoning were allowed, I could use it to downgrade the credences of arbitrarily many peers.⁷ I could even use this reasoning to

⁶ Christensen (2007), Elga (2007)

⁷ Jennifer Lackey (2008) calls this the *Many to One* problem.

downgrade the credence of an epistemic superior (or indeed many superiors), even when the superior is an expert and I am not. Clearly this would be irrational.

The equal weight view says that when peers discover they disagree, they should split the difference between their credences. But EW can be viewed as a special case of a more general view concerning how to respond to disagreement. Whenever someone with any credibility disagrees with you, this constitutes some evidence that you are wrong. To accommodate this new evidence, you have to make a relative assessment of your and your peer's reasoning and evidence. According to EW, when a peer disagrees with you, you should adjust your credence by taking a simple average of your credences. But suppose the person who disagrees is not a peer, but rather an epistemic inferior or superior. In that case rationality requires that you assign the appropriate relative weight to each credence, and adjust your own by taking the weighted average.

(II) EW and Uniqueness

In his defense of EW, Feldman argues for what he calls "The Uniqueness Thesis".⁸

Uniqueness: Given a proposition h , and a body of evidence e , there is a unique attitude toward h that is rational on e .

We can interpret 'attitude' as referring either to binary

⁸ Feldman (2006). See also Christensen (2007)

beliefs or credences. Feldman defends the principle under a binary belief interpretation and appeals to it in defense of EW. Kelly argues that Uniqueness, under a credence interpretation, is very dubious, but that EW is committed to it. Kelly goes on to argue that even if we assume Uniqueness, EW is implausible. But if Kelly is right about both the implausibility of Uniqueness, and EW's commitment to it, EW is in trouble even if his argument based on granting Uniqueness fails.

There are actually two uniqueness theses in play, Uniqueness, and what I will call "Doxastic Uniqueness":

Doxastic Uniqueness: A subject cannot rationally believe there are two (or more) rational credences for h on e , while rationally holding either.

While I agree with Kelly that Uniqueness is probably false, I will argue that EW does not entail it. EW does entail Doxastic Uniqueness, but I will argue it is true.⁹

Kelly's argument that EW is committed to Uniqueness proceeds by posing a counterexample to EW that he claims can be avoided only by endorsing Uniqueness. Suppose I am at .7 for h on e . It turns out that a slightly lower credence for h is also rational on e , say, .6. Moreover, I recognize that .6 is also rational for h on e . My peer is at .6 and recognizes that .7 is also rational. Kelly argues:

"At time t_1 , we meet and compare notes. How, if at all, should we revise our opinions? According to The Equal

⁹ Roger White (2005), like Kelly, conflates Permissiveness with Doxastic Permissiveness.

Weight View, you are rationally required to increase your credence while I am rationally required to decrease mine. But that seems wrong. After all, *ex hypothesi*, the opinion that I hold about H is within the range of perfectly reasonable opinion, as is the opinion that you hold. Moreover, both of us have recognized this all along. Why then would we be rationally required to change?"

Kelly claims the only way for EW to respond is to accept Uniqueness, thereby ruling out the conditions that give rise to the case. But that is not correct. All EW requires is Doxastic Uniqueness. That is, the EW proponent can allow that both .6 and .7 are rational on *e*, but balk at allowing that a subject could know this and remain rational at either credence.

All the same, Kelly's example, if correct, would show that even Doxastic Uniqueness is false. Kelly's argument appeals to something like the following principle:

(D): The only way my peer's credence can force me to revise my own credence is by constituting evidence that my credence is irrational.

Uncontroversially, a principle similar to D that applies to equally rational subjects who have different evidence is false. Suppose I encounter such a subject. A reliable third party who knows what evidence each of us possesses tell us that each is rational on his evidence. With this stipulation, my peer's credence need not constitute evidence that my credence is irrational. Yet clearly, his credence exerts rational pressure on me to revise my own. What is the

source of this rational pressure?

Consider the same case viewed from the perspective of binary belief. Suppose that my peer and I have different evidence for P. Again, a reliable third party tells us we are each rational on our respective evidence. Although my peer's credence need not constitute evidence I am irrational on my original evidence, there is rational pressure for me to revise my belief. Even though we may both be rational on our evidence, I know one of us has a false belief.

Return to the credence version of this case (again where my peer and I have different evidence). As we noted, in this case as well, I need not have evidence my credence is irrational on my evidence. All the same, there is rational pressure for me to revise. Here we cannot say that I have evidence that my credence is false, since credences do not have truth-values. So is it just a brute fact that in this situation, there is rational pressure to revise my credence? Surely there is some notion in a credence framework that plays the same role in exerting rational pressure for revising credences that evidence of falsity plays in a binary framework.

Jim Joyce has suggested that we can evaluate credences for their *accuracy*, as well as their rationality.¹⁰ Accuracy is a graded notion. Intuitively, the higher one's credence for a true proposition, and the lower one's credence for a false proposition, the more accurate one's credence is. Credences of 1 for a true proposition, and 0 for a false proposition represent perfect accuracy. The gradational accuracy of a credence is a measure of the

¹⁰ Joyce (1998)

distance between the value of that credence and perfect accuracy.

I propose that evidence of inaccuracy plays the same role in a credence framework that evidence of falsity plays in a binary framework. Just as evidence of falsity exerts pressure for one to revise one's beliefs, so evidence of inaccuracy exerts pressure on one to revise one's credence. Of course any credence other than 0 or 1 will be inaccurate to some degree. One is forced to revise, when one has evidence that one's credence would be more accurate if revised in a particular direction.

This is precisely how my peer's credence can exert rational pressure on me to revise, even when it is not evidence that my own credence is irrational. While our credences may be equally rational on the evidence, they cannot be equally accurate. Moreover, given our status as peers, I have no reason to suppose my own credence is more accurate than my peer's. Thus when my peer disagrees with me, I have evidence that my own credence would be more accurate if revised in the direction of her credence. This explains why there is pressure on me to revise in Kelly's case and why Kelly's assumption D is false.

One might wonder how accuracy can exert pressure in a case of shared evidence. When my peer and I have different evidence, my peer's disagreement is evidence of evidence I do not possess that rationally supports a credence different from my own. Because evidence of evidence is evidence, this explains why I possess evidence that I would be more accurate by revising in my peer's direction. I would thereby take account of my peer's

evidence that I lack.

But what is the source of the accuracy pressure in the case where my peer and I have the same evidence? In such a case, I do not have evidence of relevant evidence I don't possess. My peer's disagreement, however, is evidence of a way of reasoning from my evidence that rationally supports a credence different from my own. As I have no reason to believe my way of reasoning is more accurate than my peer's, I have evidence that my credence would be more accurate if revised in the direction of her credence. This makes it irrational for me to remain at my credence.

Note that I do not need to encounter a peer at a different credence for there to be accuracy pressure on my credence. Simply recognizing a rational credence different from my own is enough to undermine the rationality of my credence--thus the truth of Doxastic Uniqueness. In such a case, the same pressure exists to revise in the direction of the other credence. That a peer happens to hold that credence is further evidence, only insofar as it confirms my judgment that the credence is rational on the evidence. Either way, Kelly's example provides no reason to doubt Doxastic Uniqueness, and so EW's commitment to it is unproblematic.¹¹

(III) Evidential Asymmetry

The argument for EW proceeds by appealing to the apparent symmetry in peer disagreement. By stipulation, my peer (Peer) and I have the same evidence and we are

¹¹ For other arguments that EW is not committed to Uniqueness, see Ballantyne and Coffman (forthcoming) and Lee (unpublished)

equally adept at reasoning from that evidence. Thus there is no reason for me to favor my own credence over Peer's, i.e. I should give equal weight to each. Kelly objects that if there is symmetry in the evidence, it is at best, symmetry in what he calls the "psychological evidence". He notes that, in addition to our credences, there is the evidence upon which we base our credences. Suppose e in fact supports a credence of .2 but does not support a credence of .8. Then Peer is at the correct credence on e and I am at an incorrect credence. This would seem to be a significant epistemic difference. Kelly argues that the symmetry claim results from considering only the (higher-order) psychological evidence, thereby assuming that the psychological evidence "swamps" the (first-order) non-psychological evidence. But Kelly asks rhetorically, "... why should the normative significance of E completely vanish in this way?" In essence, Kelly argues that even if there is a higher-level symmetry, the fact that e rationally supports Peer's credence but not mine results in a first-order asymmetry. Thus the total evidence (both the first-order and higher-order evidence) supports giving additional weight to Peer's opinion. According to Kelly,

"... if you and I have arrived at our opinions in response to a substantial body of evidence, and your opinion is a reasonable response to that evidence while mine is not, then you are not required to give equal weight to my opinion and to your own"

And because Peer can give more weight to his own credence than mine, he needn't, as dictated by EW, split the

difference between our credences. As Kelly puts it:

"What *is* quite implausible, I think, is the suggestion that you and I are rationally required to make *equally* extensive revisions in our original opinions, given that your original opinion was, while mine was not, a reasonable response to our original evidence"

Kelly argues that there is more evidence supporting Peer's credence than mine. But it doesn't follow from the existence of this asymmetry that Peer should give extra weight to his own opinion. How Peer should revise depends on what his evidence supports. So the existence of the asymmetry provides a basis for Peer to favor his own credence only if his evidence supports the existence of the asymmetry. I will argue by *reductio* that he cannot.

The following principle is uncontroversial:

(1) Whether and to what extent one should revise one's credence depends only on what one's evidence supports.

Not surprisingly, Kelly explicitly endorses (1). Moreover, as the case is specified:

(2) Peer's evidence does not bear on whether my credence is rational on *e*.

If it did, there would be no problem of rational disagreement. Peer would be rational in ignoring my credence in virtue of his evidence supporting the claim that my credence is irrational. It is part of Peer's evidence that

he judges that my credence is irrational on e . But my judging that my credence is rational on e blocks Peer from rationally inferring that my credence is irrational on e .

Kelly argues for (3):

(3) If Peer's credence is rational on e and my credence is irrational on e , Peer should not revise by splitting the difference between our credences.

Now suppose, as Kelly urges, that Uniqueness is false. On this assumption, there will be cases where both Peer and I are rational on e . I argued in section II that where my peer and I disagree, even if I know both of us are rational on the original evidence, I must still revise my credence owing to accuracy pressures. Because in such a case, our evidential positions are symmetrical—we are equally rational on the evidence--Kelly should presumably agree with EW that in this case, Peer should split the difference. That is, Kelly should accept

(4) If both Peer's credence and my credence are rational on e , Peer should revise by splitting the difference between our credences.

But (2), (3) and (4) entail the falsity of (1). Propositions (3) and (4) entail that how Peer should revise, depends on whether I am rational on e . According to (2), Peer's evidence does not bear on whether my credence is rational

on e. It follows that Peer should revise on the basis of considerations that cannot be inferred from his evidence. This contradicts (1). Although there may be an asymmetry between e's support for Peer's credence and e's support for my credence, that asymmetry is not supported by Peer's evidence and so does not affect how Peer should revise.

It's important to see that my argument does not involve a level confusion. I am not claiming that Peer must have evidence that e supports his credence rather than mine in order for e to support his credence rather than mine. Rather I am claiming that in order to revise in a way that favors his credence over mine, Peer needs evidence that in fact e does favor his credence over mine. And as the case is specified, Peer does not have such evidence.

So which of (2), (3), and (4) should we give up? It is hard to see how (2) could be resisted. And as both Kelly and defenders of EW should agree on (4), it's clear that (3) has to go. So Peer should split the difference whether or not I am rational on e. That extra-evidential fact cannot make a difference in how Peer should revise.

(IV) An Objection: Unmediated Appreciation of the Evidence

Premise (2) of the *reductio* argument says that Peer's evidence does not bear on whether my credence is rational on e. But the relationship between a body of evidence e and judgments about whether a particular credence is rational

on e is obscure. Kelly acknowledges that in a peer disagreement, neither peer has independent higher-order evidence that favors her own credence over her peer's. By stipulation, peers are equally good at assessing evidence. So when there is disagreement, neither has any independent evidence for who has responded correctly to the first-order evidence. All the same, Kelly holds that on some occasions, one's rationally responding to the evidence is due to one's recognizing, via an unmediated appreciation of one's evidence, that one's evidence supports one's belief. According to Kelly:

"... it is implausible that every case in which one recognizes that a given belief is supported by one's first order evidence is a case in which one's recognition depends on one's having some independent, higher order evidence to the effect that one's evidence supports that belief. Rather, in some cases, one's recognition that one's evidence supports a given belief is based on an unmediated appreciation of that evidence itself. Thus, in such cases, one's first order evidence not only confirms the belief in question; it also confirms a proposition to the effect that it is reasonable for one to hold that belief." (52)

But one's evidence e is not itself evidence for what one is reasonable to believe on the basis of e . I can confidently judge that x 's appearing red is evidence that x is red. And I can make this judgment even though I'm not looking at x and indeed have no idea how x looks. If I then look at x and it appears to be red, I have good evidence that x is red. But I am in no better position to judge that x 's

looking red is evidence that it is red. So x's looking red does not confirm that x's looking red is evidence that it is red. We make judgments about evidential support relations a priori on the basis of the content of evidential propositions.¹² Possessing the evidence is simply not relevant.

I suspect Kelly meant to say that's *one's having* the first order evidence can confirm that one is rational. If I appreciate that e is evidence for h, my possessing e confirms that I'm rational in believing h. This is certainly true, but the important point, I take it, is that one can have an unmediated appreciation of one's rationality on one's evidence.

How does this bear on the *reductio* argument? I argued in defense of (2) that Peer's evidence does not bear on whether I am rational on e. But it is unclear how (1) applies in cases of *a priori* rationality. We can finesse this issue by treating an *a priori* rational proposition as trivially (though defeasibly) supported by any evidence. Does this help TE? I argued in defense of (2) that if Peer's evidence did support that my credence is irrational on e, Peer would be rational to maintain his credence. But again, Kelly does not endorse that. This suggests that whether I am rational is not (trivially) inferable from Peer's evidence.

(V) Second-Order Credences

¹² I don't mean to commit to judgments about evidential relations being a priori. It is obscure in general how we make these judgments.

Perhaps the case for TE can be improved if we think of second-order belief states as graded rather than binary.¹³ Kelly claims that the EW proponent cannot simply assume that:

"When you correctly recognize that the evidence supports p , you are no more justified in thinking that the evidence supports p than I am in thinking that the evidence supports not- p when I mistakenly take the evidence to support not- p ."

Kelly expresses the point in terms of degrees of justification for binary believing. On the supposition that second-order belief states are graded, Kelly is suggesting the possibility that if Peer correctly recognizes that he is at the correct credence on e , it will be rational for him to have a higher credence that he is rational on e than it will be for me to have that I am rational on e .

This issue is difficult to approach because it is obscure how we make these second-order judgments, and in particular, what they are based on. But let us suppose for the sake of argument that correctly recognizing that one is rational allows one to have a higher credence for one's own rationality than a peer who incorrectly judges she is rational.¹⁴ Kelly argues that if this is the case, there is an

¹³ Both Tom Kelly and David Christensen suggested this to me.

¹⁴ Here is one scenario where despite the fact that my peer is correct about what the evidence supports and I am not, I am more justified in thinking the evidence supports my credence than my peer is in thinking the evidence supports his credence. Suppose that my peer's reasoning from the evidence, though correct, is extremely complicated. Suppose that my reasoning from the evidence is simple and straightforward, though incorrect because of an extremely hard to see defeater in my

important asymmetry that undermines EW.

"...if you were better justified in thinking that your response was reasonable than I was in thinking that my response was reasonable, then this would break the putative higher level symmetry and provide a basis for favoring your original belief over mine."

Put in terms of credences, Kelly is saying that if it is rational for Peer to have a higher credence for the rational correctness of his response than it is for me to have for the rational correctness of my response, then this would provide a basis for Peer to favor his response over mine. But Kelly needs a further premise, viz., that after Peer and I meet, it remains rational for Peer to have a higher credence than me. According to Kelly, what initially justifies Peer's higher credence for the correctness of his response is his recognition that his response is correct. But one recognizes P is the case only if one knows P is the case. And presumably, it is uncontroversial that after we meet, Peer no longer knows that his credence is correct. If he did, it would be hard to explain why he could not simply ignore the evidence that I am at a different credence. So as far as Kelly's argument is concerned, there is no reason to suppose that after we meet, the higher-level asymmetry still exists.¹⁵

evidence. In such a case it is not clear why it would not be more rational for me to think I am correct about what the evidence supports than my peer is.

¹⁵ Kelly recognizes this point, but seems to think that as long as an asymmetry exists prior to our encounter, an asymmetry will remain after our encounter. But given that the asymmetry depends on Peer

But suppose it were true that this higher-level asymmetry in our rational credences for the correctness of our respective responses remains even after we meet. How does this provide Peer with a basis for favoring his response over mine? We have already seen that an asymmetry in the first-order evidence does not give Peer a basis for favoring his credence over mine, provided the asymmetry is not inferable from his evidence. This is no less true for higher-order credences than for first-order credences. The asymmetry Kelly alleges is this:

(5) It is rational for Peer to have a higher credence for the rational correctness of his response than it is for me to have for the rational correctness of my response.

Does this have any implications for how Peer should revise upon learning that I am at a different credence? Surely the mere fact that (5) is true is not relevant for how Peer should revise his response. Consider an analogy drawn by Kelly:

"Compare a situation in which you are better justified in thinking that your thermometer is functioning properly than I am in thinking that my thermometer is functioning properly."

Kelly's point is that in such a case, you would have a basis for favoring what your thermometer reads over what my thermometer reads. But this is simply not true. What matters is not whether you are better justified in thinking

recognizing his credence is correct, and given that after we meet, he no longer recognizes this, I do not see how the asymmetry will remain.

your thermometer is functioning properly than I am in thinking mine is functioning properly. Rather, what matters is what you are justified in thinking regarding the relative functioning of our respective thermometers. If you are justified in thinking your thermometer is functioning better than mine, then you are rational to favor your own thermometer's reading. But it does not follow from your being better justified in thinking your thermometer is functioning properly than I am in thinking my thermometer is functioning properly, that you are justified in thinking that your thermometer is functioning better than mine. For all we have said, you may have no idea how my thermometer is functioning.

Analogously (putting the point in terms of credences)

(5) It is rational for Peer to have a higher credence for the rationality of his response than it is for me to have for the rationality of my response.

does not entail

(6) It is rational for Peer to have a higher credence for the rationality of his response than it is for him to have for the rationality of my response.

Can (6) be true in virtue of Peer's unmediated appreciation of what the evidence supports? It certainly could. Suppose that before Peer and I meet, Peer considers whether .8 or .2 is rational on e . There is no reason why he could not thereby rationally become more confident that .2 is rationally correct, than that .8 is rationally correct. In

order to preserve the symmetry, we must suppose that I consider whether .8 or .2 is rational on e and thereby become more confident (to the same degree) that .8 is rationally correct than that .2 is rationally incorrect. It is no part of EW that one must give equal weight to one's peer's credence if one has spent more time evaluating the evidence than one's peer has.ⁱ

Now we have a 3rd-order peer disagreement concerning what our confidence should be regarding the rationality of our confidence in the rationality of our 1st-order credences. Does peer have any basis for favoring his 3rd-order credence over mine? Here the dialectic simply repeats. For any level n , Peer's n level confidence that his $n-1$ level credence is more rational than my $n-1$ level credence could be matched by my equal n -level confidence that my $n-1$ level confidence is more rational. At no level, would Peer be entitled to be more confident than I.

(VI) A Worry about my Splitting the Difference as Well?

I have argued that Peer should split the difference between our credences, even though he is rational on e , but I am not. How should I revise my credence? According to EW, I should split the difference as well. But here Kelly argues that EW encounters trouble. According to EW, by moving to the midpoint between our credences, both Peer and I arrive at rational credences. One might wonder how I end up being as rational as Peer, given that Peer, but not I, was rational before we split the difference. Even more

puzzling, suppose that neither of us had initial rational credences on *e*. EW would still dictate that we split the difference between our credences. How do we manage to arrive at rational credences simply by splitting the difference between our two irrational credences?

According to Kelly,

"On The Equal Weight View, our high level of confidence that *H* is true [after splitting the difference] is automatically rational, despite the poor job that each of us has done in evaluating our original evidence. (Indeed, it would be unreasonable for us to be any less confident than we are at that point.) However, it is dubious that rational belief is so easy to come by".

In defense of EW, David Christensen argues that Kelly misinterprets EW.¹⁶ According to Christensen:

...the Equal Weight Conciliationist is committed to holding, in Kelly's cases, that the agents have taken correct account of a particular bit of evidence—the evidence provided by their peer's disagreement. But having taken correct account of one bit of evidence cannot be equivalent to having beliefs that are (even propositionally) rational, all things considered".

What does Christensen's mean by an agent's haven "taken correct account of a particular bit of evidence". It is a truism that one must always take into account one's total

¹⁶ Christensen (2010)

evidence. Christensen seems to be saying that if one is irrational on one's initial evidence, one can still take correct account of further evidence in a way that does not require one to correctly take account of one's initial evidence.

We can gain some clarity on this issue by considering this issue within a binary belief framework. Suppose I irrationally believe (say on the basis of consulting a Ouija board) that

(9) London is in France.

I then learn that

(10) Obama is in London.

From (9) and (10), I infer

(11) Obama is in France.

Is my inference rational?

Here it is useful to distinguish between two kinds of rationality principles--wide scope and narrow scope.¹⁷ Wide scope principles concern coherence requirements, but do not in themselves make rational any particular inferences. Narrow scope principles do make rational particular credences. If you think I am rational to infer (11), you are appealing to an instance of a narrow scope principle:

¹⁷ Broome (1999)

N: If I believe London is in France and that Obama is in London, then it is rational for me to infer that Obama is in France.

In N, only the consequent of the conditional is within the scope of the rationality operator. It thus permits detachment of the consequent when the antecedent is satisfied. Now consider the wide scope version of the principle:

W: Rationality requires that if I believe that London is in France and that Obama is in London, then I believe that Obama is in France.

W has the entire conditional within the scope of the rationality operator. This prevents the kind of detachment allowed by N. Instead W states a weaker coherence requirement that entails that I am irrational if the antecedent is true and the consequent is false. W does not require that when the antecedent is satisfied, I should believe that Obama is in France. I can satisfy W by instead giving up my belief that London is in France.

I strongly doubt that N states a requirement of rationality. Given that my belief that London is in France is irrational, surely rationality requires that I give up this belief rather than that I make an inference from this irrational belief. If N were true, rationality would require that I adopt an irrational belief. I doubt that this is coherent.

Of course, if I retain my belief that London is in France, and do not infer (upon learning that Obama is in London) that Obama is in France, I would be incoherent and perhaps thereby guilty of further irrationality. But in the first instance, rationality requires that I give up my irrational belief that London is in France.

This kind of narrow scope principle is no more plausible when applied to credences than when applied to beliefs. In the credence case we get from the narrow scope principle.

N': If I have a credence of .8 for h, on e, and I encounter a peer at .2, on e, then rationality requires that I revise my credence for h to .5

The wide scope version of the principle yields:

W': Rationality requires that if I have a credence of .8 for h, on e, and I encounter a peer at .2 for h, on e, then I revise my credence for h to .5

W' states a coherence requirement that entails I am irrational if the antecedent is true and the consequent is false. W' does not say that when the antecedent is satisfied, I should move to a credence of .5. I can satisfy W' by giving up my .8 credence for h/e (and presumably, my .8 credence for h).

N' is no more plausible than N. Given that my credence of .8 for h (on e) is irrational, surely rationality requires my giving up my conditional credence for h on e

(as well as my credence for h), rather than my revising on the basis of my irrational credence. Again, if N' were true, rationality would require that I adopt an irrational credence. I suggest that whatever intuitive appeal this kind of narrow scope principle has comes from failing to distinguish it from its wide scope counterpart.

So what can we make of Christensen's notion of taking correct account of a particular bit of evidence. As Christensen notes, taking correct account of a particular bit of evidence does not ensure that one arrives at a rational credence. So perhaps we can interpret Christensen as endorsing only the wide scope principle W' . If I retain my irrational conditional credence for P on my original evidence P but fail to move to $.5$, I would suffer from a kind of incoherence and perhaps thereby be guilty of further irrationality.

But how does the wide scope principle enable EW to respond to Kelly's objection that EW gives us the wrong result in a case where at least one peer is at an irrational credence on the original evidence? Christensen seems to be saying EW need not endorse as rational my moving to $.5$. Rather EW simply tells me not to make a bad situation worse. My $.8$ credence is irrational on e , and to simply remain at $.8$ in the face of Peer being at $.2$ would make me even more irrational. The wide scope principle permits me to give up my $.8$ credence rather than move to $.5$, but that will result in a rational credence only if I thereby move to a credence rational on my total evidence. So on Christensen's interpretation of EW, it is silent on what my rational credence is. EW is a theory only of how one should

respond to Peer disagreement when one is at the correct credence on the original evidence.

In defense of his interpretation Christensen says:

“If one starts out by botching things epistemically, and then takes correct account of one bit of evidence, it’s unlikely that one will end up with fully rational beliefs. And it would surely be asking too much of a principle describing the correct response to peer disagreement to demand that it include a complete recipe for undoing every epistemic mistake one might be making in one’s thinking”.

But TE does precisely what Christensen says cannot be done. It tells me how to undo my original mistake, viz., adjust my credence to whatever is rational on my total evidence--e and Peer’s being at .2. So one cannot defend EW by claiming that it would be too demanding to require that it tell us how to revise an irrational credence. Rather, on Christensen’s interpretation, EW is an incomplete account of how one should revise in a peer disagreement situation.

(VII) Is it Rational for me to Split the Difference?

I've argued against Kelly that the rational credence for Peer is .5. We are now considering whether, as EW enjoins, my credence should also be .5. Kelly has objected that because my original credence of .8 is irrational on e, allowing that my moving to .5 is rational would make it too easy for me to acquire a rational credence.

This is an important objection to EW. It may be that

EW can be defended only as a theory of how one should revise when one is at a rational credence. If we give up EW for cases where one is at an irrational credence, how should one revise in such a case? Consider how I should revise given that Peer is at a rational credence but I am not. My evidence consists of e along with Peer's being at .2. We have stipulated that .2 is the correct credence on e . Thus it seems that all of my evidence supports .2 as the correct credence. So the rational credence for me is .2. Of course, I would not be in a position to know that .2 is the rationally correct credence for me. But one is not always in a position to know what the rationally correct credence is on one's evidence.

This conclusion may strike some as odd. Previously, I argued that Peer, whose credence is rational on e , should split the difference with me and move to a credence of .5. And I have just argued that I, being at an irrational credence on e , should move to Peer's original credence of .2, which is in fact the rationally correct credence on e . So if at this point, both Peer and I revise rationally, I, but not Peer, will arrive at the correct credence on e . This means that in a peer disagreement where with respect to the original evidence one peer is rational and the other is irrational, if they both revise rationally, the irrational peer ends up in a better position than the rational peer. But this simply reflects that fact that in the disagreement, the rational peer receives misleading evidence whereas the irrational peer does not. So as a result of our disagreement, Peer is rationally required to move off his correct credence on e , and I am rationally required to move to the correct credence on e . Peer is rationally required to move off of

the correct credence on e , whereas I am rationally required to move to the correct credence (on e) of .2. So if at this point, both Peer and I revise rationally, I, but not Peer, will arrive at the correct credence on e .

Having said that, there may be a way for EW to explain how I end up with a rational credence at .5. We are assuming that when I learn of Peer's credence, I should treat it as evidence against the rationality of my credence. And that is because by stipulation, I have reason to think Peer is generally rational. Then by definition (of 'peer'), I have equally good reason to think I'm generally rational. That counts as (defeasible) evidence in favor of the rationality of my credence. That is to say,

(12) My credence for h on e is n , and I'm generally rational is a (defeasible) reason for

(13) My credence of n for h on e is rational.

Typically one does not reflect on these higher-order considerations and they play no role in determining the rationality of one's first-order credence. One bases one's first-order credence on only the first-order evidence. But in a peer disagreement, these higher-order considerations come into play. In order to determine how I should revise my credence, I must reflect on the credences Peer and I hold on the basis of e , and the extent to which, each of us is generally rational. This explains how it is that I can move from an irrational credence to a rational credence. I do so on the basis of my higher-order evidence that did not figure

in the rational basis for my original credence, viz., the evidence that I am at .8 and the evidence of my general rationality. Entering into the peer disagreement brings positive evidence to bear on the rationality of my credence that was not operative before. There is nothing puzzling about how I can move from an irrational credence to a rational credence, if I do so on the basis of new evidence in favor of my general rationality.

This response to Kelly's objection on behalf of EW assumes that my being at a particular credence can be evidence for me. In different contexts, both Christensen and Kelly call this explanation into question.

Christensen argues that there is an asymmetry between the evidential force of one's own credence, and the evidential force of one's Peer's credence.¹⁸ Here is Christensen discussing a peer disagreement over the answer to addition problem:

"Suppose I do some calculations in my head, and become reasonably confident of the answer 43. I then reflect on the fact that I just got 43. It does not seem that this reflection should occasion any change in my confidence. On the other hand, suppose I learn that my [my peer] got 43. This, it seems, should make me more confident in my answer. Similarly, if I learn that [my peer] got 45, this should make me less confident...we may take the first-person psychological evidence to be incapable of providing the sort of check on one's reasoning that third-person evidence

¹⁸ Christensen (2010)

provides. In this sense, it is relatively inert. So the important determinants of what's rational for [my peer] to believe are the original evidence E1... and [my] dissent... In contrast, the determinants of what [I] should believe are E1... and [my peer's] belief..."

If Christensen is correct, then contrary to the way I have argued, my holding a particular credence cannot be a determinant of what credence is rational for me. I agree with Christensen that the mere fact that I got the answer 43 should not, in itself, raise my confidence in my answer. But similarly, the mere fact that Peer got 45 should not, in itself, lower my confidence in my answer. Peer's getting 45 is evidence against my answer of 43 just in case it is reasonable for me to think that Peer is generally rational. But similarly, if it's reasonable for me to think that I am generally rational, then my getting 43 is evidence for my answer of 43.

This is not to say that in the typical case, my evidence for my own credence derives from reflecting on my own rationality. I am merely noting what is the case when I do so reflect. Subjects who know they are generally rational have a general (defeasible) reason to suppose that their own credences are rationally correct.

Having said this, I think there is an asymmetry between the evidential force of my own credence and the evidential force of Peer's credence. Christensen is correct to say that reflecting on my own credence (even along with my general rationality) cannot provide me with a reason to revise my first-order credence. Such reflection can at most provide a basis for boosting my second-order confidence in

my first-order credence, or provide a justification for my first-order credence where none existed before. Peer's credence (along with his general rationality) can force me to revise my first-order credence.

In a different context, Kelly argues that if my higher order evidence concerning my own rationality were sufficient for the rationality of my first-order belief, the distinction between rational and irrational belief would collapse:¹⁹

"It seems as though the only principled, not *ad hoc* stand for the proponent of The Equal Weight View to take is to hold that the psychological evidence swamps the non-psychological evidence even when the psychological evidence is exhausted by what you yourself believe. ... after one arrives at some level of confidence—in the present example, a degree of belief of .7—how confident one should be given the evidence that one then possesses is... .7. Of course, if one had responded to the original evidence in some alternative way—say, by giving credence .6 or .8 to the hypothesis--then the uniquely reasonable credence would be .6 or .8. On the picture of evidence suggested by The Equal Weight View, the distinction between believing and believing rationally collapses."

If Kelly is right, then the view I am defending leads to an absurd consequence. But it is surely too quick to say that this view collapses the distinction between believing and believing rationally. One may have no evidence of one's

¹⁹ Kelly (2010)

own rationality, e.g., one could be suffering from amnesia. Or one could simply be a bad reasoner and know it. In these cases, if one reasons badly from one's evidence, one thereby ends up with an irrational belief.

Despite this, Kelly could argue that this view would make it impossible for anyone who knows she is generally rational to have an irrational credence. This would still be an absurd consequence. But it is not clear that the view has even this result.

We can distinguish between subtly incorrect reasoning, and obviously incorrect reasoning. As an instance of the first, consider van Inwagen's consequence argument for incompatibilism.²⁰ Lewis's response demonstrates a subtle mistake in van Inwagen's argument--we can suppose.²¹ I claim that in this case, prior to encountering Lewis's argument, van Inwagen could have reasoned from his general rationality to the rationality of his belief in incompatibilism based on his argument.

Compare this with a subject Smith who engages in a flagrantly hasty generalization. Smith is generally rational, but for irrational reasons, dislikes people with blonde hair. After observing a person with blonde hair commit a crime, he infers that all people with blonde hair are criminals. Now suppose Smith reasons from his general rationality, to the conclusion that his belief that all people with blonde hair are criminals is rational. Here I want to say that the obvious irrationality of his reasoning defeats his inference from his general rationality to the rationality of his belief

²⁰ van Inwagen (1975)

²¹ Lewis (1981)

that all people with blonde hair are criminals.

So what is the difference between van Inwagen and Smith? Why is Smith's inference defeated and not van Inwagen's? The difference between the two cases consists is just how they were described--van Inwagen commits a subtle error, and Smith commits an obvious error. The obvious irrationality of Smith's reasoning constitutes a defeater of his inference from his general rationality to the the rationality of his belief that all people with blonde hair are criminals. But van Inwagen, because his error is so subtle--it took a mind like Lewis's to discover it--does not have such a defeater (prior to his encounter with Lewis). That is why van Inwagen, but not Smith, has rational support for his belief.

This account raises issues about what it is to possess defeating evidence. Suppose I reason rationally from e to h . I possess some evidence d such that a line of reasoning from d , that only a super-genius could appreciate, defeats my inference from e to h . Do I rationally believe h ? I have argued that in such a case, because the defeating reasoning can only be appreciated by a super-genius, I do believe h rationally. But I can see someone arguing that it does not matter how opaque the reasoning is to the defeater. If there is any way to reason from my evidence to a defeater of my inference, then I do not believe h rationally.

Perhaps we can distinguish between distinct notions of rationality. The first notion does not tolerate any defeaters being supported by one's evidence, no matter how subtle the reasoning is from the evidence to the defeater. We can call this "Ideal Rationality". The second notion allows that one can be rational in believing h on the basis of e , even

though one's evidence supports a defeater, provided that the reasoning from the evidence to the defeater is not obvious.

Here it is natural to inquire, "...obvious to whom?" In normal parlance, we can say that a subject is overlooking something obvious, even though it is not obvious to him. So to whom is it obvious? My suggestion is that ascriptions of obviousness are indexed to a particular standard for reasoning ability. In different contexts, different standards are in play. So just as we may disparage someone who is not very bright for failing to see the obvious validity of a straightforward modus tollens argument, so a race of super-geniuses may disparage us for failing to see the "obvious" proof of Fermat's Last Theorem. We can call this second notion "Intersubjective Rationality".²²

The upshot, on the supposition that Lewis discovered a subtle error in van Inwagen's consequence argument, is that we can say that van Inwagen's belief in the conclusion is intersubjectively rational, but not ideally rational. Smith's belief is neither.

(VIII) EW and the Commutativity of Evidence Acquisition

According to EW, when disagreeing peers meet, they should split the difference between their credences. But this leads to an absurd result. Suppose you encounter two peers in succession. Intuitively, the order in which you encounter them is irrelevant to the credence you should

²² For more on this notion of intersubjective rationality, see Cohen (1987)

have after you have met them both.

Suppose I am at .9 for p , and I encounter a peer at .1. EW says that I should split the difference between our credences and revise my own to .5. Next I encounter another peer at .7. EW tells me to again split the difference and revise to .6.

But suppose we reverse the order in which I encounter the peers. Starting with my original credence of .9, I first encounter the peer at .7. EW says that I should revise to .8. But then when I meet the second peer at .1, I should move to .45. So EW dictates that I adopt different credences depending simply on the order in which I encounter the two peers. But this is absurd. The rationality of my credence is a function of my total evidence regardless of the order in which I acquired the evidence.²³

EW has this absurd result only if we interpret it to mean that one should split the difference with every peer one encounters. But EW should not be construed in that way. The core idea of EW is that I should give equal weight to my peer's judgment and my own judgment. So in the special case where I've encountered only one peer, I should split the difference, i.e. move to the average of our credences. But I can encounter indefinitely many peers. If I split the difference with each one, I am in effect giving increasing weight to each new peer I encounter.²⁴ Surely this is not in the spirit of EW. Just as I should give the same weight to a peer's judgment as I give to my own, I should give equal weight to the judgments of all of my

²³ This problem is discussed by Juan Comesana in an unpublished paper. See also Kelly 2010

²⁴ Thanks to Peter Milne for this way of putting the point.

peers. This means that as I encounter new peers, I should revise by continually averaging over all of them. So regardless of the order in which I encounter them, I will end up with the same credence.

(IX) Approximately Splitting the Difference

Christensen has been a defender of the spirit of EW. But he observes that there is reason to depart from the letter. Because of what Jennifer Lackey calls "personal information" one should only approximately split the difference with one's peer.²⁵ Personal information concerns what one knows about one's own condition. I can be more certain that I am not rationally impaired by drugs, emotional stress, sleep deprivation, etc., than I can about my peer. Thus in a typical peer disagreement, it is rational for me, on this basis, to give slight additional weight to my own opinion. In cases where my peer holds an opinion that seems crazy, e.g. he denies a Moorean proposition, my personal information will make it rational for me to give substantial extra weight to my credence.²⁶

This is surely correct. Strictly speaking, EW is only approximately correct. It is worth noting that a stability issue arises in connection with approximately splitting the difference. If I revise my credence in this manner, and I know nothing about whether or how my peer has revised, then I can rationally remain at my new credence. But if I learn my peer has approximately split the difference as well, that gives me less

²⁵ Lackey (2008)

²⁶ Lackey (2008), Christensen (2010)

reason to suspect he is rationally impaired. This would require me to revise further in the direction of my peer. If he also revises in this way, that gives me still less reason to suspect he is rationally impaired, and so I should revise in the direction of my peer again. In a case where my peer is not impaired, this process will continue indefinitely, so long as each of us knows of the other's revisions. This raises game-theoretic issues that I will not pursue, except to note that my peer and I will not agree at the limit. In addition to worries about my peer's rationality, there are worries about whether he is intentionally misleading me about his credences. As he could be systematically misleading me with each revision, i.e., mimicking a rational agent, there is no way to eliminate that possibility.²⁷

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