**Disagreement and Higher-Order Evidence**

Jonathan Matheson

[DRAFT for *The Routledge Companion to Evidence*. Eds. M. Lasonen-Aarnio, and C. Littlejohn.]

The epistemology of disagreement focuses on the question of what it is rational to believe when you discover that another disagrees with you. Much of the literature on the epistemic significance of disagreement has focused on examining a particular kind of disagreement - peer disagreement. Peer disagreement is a disagreement between epistemic equals of a sort. Two individuals are epistemic peers with respect to a proposition at a time just in case they are in an equally good epistemic position with respect to that proposition at that time.[[1]](#footnote-1) So, epistemic peers regarding p at t are equally likely to be right about p at t. Here it is worth making a further distinction between evidentially equivalent peers and evidentially distinct peers. Two individuals can be in an equally good epistemic position on some matter without possessing exactly the same evidence. Distinct bodies of evidence can be equally good.[[2]](#footnote-2) Evidentially equivalent peers are peers regarding p who share the same total evidence relevant to p. Evidentially distinct peers regarding p are peers regarding p that do not have the same total evidence with respect to p.

A central question, then, is what is it rational for peers about p to believe about p when they discover that they disagree about p? However, the significance of disagreement goes far beyond peer disagreement. Peer disagreement is highly idealized, yet the threat that we experience from disagreement is very real. Many of our deeply held beliefs (religious, ethical, political, etc.) are beliefs that we know to be deeply contentious. So, further questions in the epistemology of disagreement concern what it is reasonable for us to believe about these clearly contentious claims. The fact that the disagreeing parties are typically not peers does not remove the skeptical threat since some non-peers are epistemic superiors and in other cases it is difficult to determine which party is in the better epistemic position, even if it is clear that the parties aren’t in exactly the same epistemic position.[[3]](#footnote-3) However, it is plausible that the best way to get a start on answering the messier cases of real word disagreement is by getting a handle on the epistemic significance of disagreement itself by controlling for the other epistemically relevant features. Examining cases of peer disagreement attempts to do just that. The hope is that by examining idealized cases of peer disagreement we can learn something of disagreement’s significance and get at least one piece of the puzzle in place regarding the broader picture of the epistemology of disagreement.

As Feldman (2009) has noted, the puzzles concerning what it is rational to believe in the face of disagreement are primarily puzzles about higher-order evidence. Higher-order evidence is to be contrasted with first-order evidence. Whereas first-order evidence for some proposition is evidence directly pertaining to the truth of that proposition, higher-order evidence concerning some proposition is (first-order) evidence about one’s (first-order or higher-order) evidence for that proposition.[[4]](#footnote-4) For example, suppose that you gain some testimonial evidence from a reliable source that butter is healthier than margarine. This is some first-order evidence in favor of the proposition that butter is healthier than margarine. Suppose further that you then learn that your testimonial source has a strong financial interest in butter production and sales, and is likely to be biased on the matter. This is some higher-order evidence that calls into question the merits of your first-order testimonial evidence. This information does not directly provide evidence for or against the target proposition about butter, but it does give direct evidence about your evidence for this proposition. Common examples of higher-order evidence are information about biases, cognitive malfunctions, and disagreement.[[5]](#footnote-5)

Evidence of disagreement is a source of higher-order evidence since it is either evidence about what other people’s evidence supports or evidence about what your shared evidence supports. Consider a case of peer disagreement. A discovery of a disagreement with an evidentially identical peer gives you reason to believe that you have misjudged your shared evidence. Since you and your peer are equally likely to judge the evidence correctly and you have each judged the shared evidence differently, you gain evidence that you have misjudged what your shared evidence supports.[[6]](#footnote-6) This is higher-order evidence about your shared evidence since it is evidence about what doxastic attitude toward the disputed proposition the shared evidence supports.[[7]](#footnote-7) A discovery of a disagreement with an evidentially distinct peer gives you evidence that there is a distinct body of evidence from the one you possess that indicates that a different conclusion is rational. If there is a fact of the matter on the disputed issue, then one of your bodies of evidence is a misleading body of evidence. However, given that you are peers, it is equally likely that it is your evidence that is misleading as it is that it is your peer’s – there is no good reason to prefer your own body of evidence to your peer’s. After all, peerhood ensures that your bodies of evidence are equally good.[[8]](#footnote-8) So, learning of a peer disagreement gives you higher-order evidence about the evidence that you posses as well as higher-order evidence about another body of evidence (you peer’s).

The puzzles concerning the epistemic significance of disagreement turn on how we understand the impact of such higher-order evidence. The following questions are raised and are useful for distinguishing the various views on the epistemic significance of peer disagreement:

Q1: Does the higher-order evidence from disagreement give you a defeater for the rationality of your belief?

Q2: If yes to Q1, then how strong is this evidence/this defeat?

Q3: If yes to Q1, then under what conditions is this defeating evidence itself defeated?[[9]](#footnote-9)

Defeaters are central to both Q1 and Q3. We can understand defeaters as follows:

If evidence E justifies having doxastic attitude A toward proposition P, then D is a defeater for E’s justifying A toward P just in case the combination of E and D does not support having A toward P.[[10]](#footnote-10)

So, defeaters take away the justification one had for holding a particular doxastic attitude toward a proposition. Defeaters have been seen to accomplish their defeating effect in two ways. Rebutting defeaters defeat one’s justification for believing p by providing evidence that p is false – they directly tell on the question of whether p. Undercutting defeaters defeat one’s justification for a belief by attacking the connection between one’s evidence and one’s belief – they do not directly tell on the question of whether p.

Views on the epistemic significance of disagreement can be distinguished by how they answer these three questions about the impact of higher-order evidence. Steadfast views of disagreement claim that it can be rational to stick to one’s guns in a case of peer disagreement. As such, views that answer ‘no’ to Q1 are Steadfast views. Conciliatory views of disagreement maintain that learning of a peer disagreement calls for some doxastic change, a change in attitude or a reduction in confidence, regarding the disputed proposition. Conciliatory views give a ‘yes’ answer to Q1.[[11]](#footnote-11)

Why might the higher-order evidence of a disagreement give you a defeater? A ‘yes’ answer to Q1 can be motivated in several ways. Let’s start by looking at a paradigm case of peer disagreement that motivates such an answer.

RESTAURANT CHECK

Suppose that five of us go out to dinner. It’s time to pay the check, so the question we’re interested in is how much we each owe. We can all see the bill total clearly, we all agree to give a 20 percent tip, and we further agree to split the whole cost evenly, not worrying over who asked for imported water, or skipped desert, or drank more of the wine. I do the math in my head and become highly confident

Conciliatory Views of Disagreement and the Equal Weight View 69

that our shares are $43 each. Meanwhile, my friend does the math in her head and becomes highly confident that our shares are $45 each. (Christensen 2007, 193)

In Restaurant Check, it is plausible that the disagreeing parties should become less confident in the proposition they believe, if not give it up entirely. If a reduction in confidence by the disagreeing subjects is called for from having learned of the disagreement, then they have each acquired a defeater for the justification of their respective doxastic attitude. Since they are no longer justified in adopting the same credence in the target proposition each party has acquired a defeater by gaining the higher-order evidence from learning of the disagreement.

Additional motivation for a ‘yes’ answer to Q1 comes from thinking about the impact of similar pieces of higher-order evidence. First, gaining higher-order evidence that an expert about p disagrees with you about p (where you are not an expert about p) gives you a strong defeater for your doxastic attitude toward p. If I am a novice about astronomy and believe that Jupiter has less than 16 moons, learning that an expert in the field firmly believes that Jupiter has over 16 moons gives me a strong reason to abandon my disbelief. Such higher-order evidence would defeat any justification I had for believing that Jupiter has less than 16 moons. If the higher-order evidence gained from novice-expert disagreement is a strong defeater, then it is plausible that the evidence gained from peer disagreement is also a defeater, even if the defeating evidence in such a case is less strong.

Second, gaining evidence that a large number of peers independently disagree with you about p gives you a strong defeater for your doxastic attitude toward p. Suppose that I believe that Toronto is the capital of Canada, but in independently consulting 100 of my peers I come to find out that all of them disbelieve this. Learning of 100 independently disagreeing peers gives me a strong defeater for my belief that Toronto is the capital of Canada. If the higher-order evidence from multiple peer disagreement is a strong defeater, then it is plausible that evidence gained from single peer disagreement is also a defeater, even if the defeating evidence here is less strong.

Finally, we can consider the higher-order evidence gained from agreement. Suppose a physician is considering a complicated body of evidence and comes to find it to support diagnosis X. Suppose further that the physician then consults a peer who also evaluates the evidence to support X. Learning of this peer agreement gives the physician higher-order evidence that she correctly evaluated the first-order evidence. If the higher-order evidence from agreement calls for an increased confidence in what the evidence supports, then it is plausible that the evidence gained from peer disagreement is a defeater. If evidence of agreement bolsters the connection between one’s evidence and the target proposition, then plausibly evidence of disagreement weakens this connection.

Despite such motivation for a ‘yes’ answer to Q1, however, a number of philosophers have seen things differently. The first arguments against such an understanding of impact of higher-order evidence come from Thomas Kelly (2005). Kelly gives several reasons for thinking that higher-order evidence does not affect which doxastic attitude it is rational to have toward the target proposition. First, Kelly considers are practices of giving evidence for a claim and notes that we do not typically cite our belief that p as one of our reasons for thinking that p is true. In other words, our practices do not seem to indicate that we treat our evaluation of the evidence as being an additional piece of evidence relevant to what it is rational to believe about the target proposition. While Kelly correctly diagnoses our practices, there is a better explanation of them that reinforces the view that higher-order evidence is relevant to the target proposition. It is first important to note that we rarely cite all of our evidence and it would violate conversational maxims to cite pieces of evidence of which all the relevant parties are clearly aware. Second, it is appropriate to cite someone else’s evaluation of the evidence (particularly an expert), so any impropriety seems to be in citing one’s own belief. Someone else’s evaluation of the evidence is only evidence for me, and not for him, if evidence is agent relative. A more plausible view of evidence is that the status of a piece of information as evidence does not depend upon who possesses that information.[[12]](#footnote-12) Given all of this, the impropriety of citing one’s own belief is better understood as resulting from conversational and societal norms.[[13]](#footnote-13)

Kelly’s second reason for discounting the impact of higher-order evidence is that to count the higher-order evidence in addition to the first-order evidence would be to engage in a kind of double-counting. Since I hold the belief that I do on the basis of my evaluation of the first-order evidence, to count my belief in addition to the first-order evidence would essentially be to count that first-order evidence twice. While Kelly is perhaps right that my mere belief that p is not further evidence that p, the fact that a reliable evaluator of the evidence has determined that it supports p does appear to be evidence relevant to whether p is true (whether or not the subject is that very evaluator).

Kelly also gives an argument that assumes that higher-order evidence is relevant to what it is rational to believe about the target proposition in order to show that even on this assumption discovering a disagreeing peer does not affect what it is rational to believe about the target proposition. To do so, Kelly supposes that at t1 evidentially equal peers have each evaluated their evidence E differently. At t2, the peers meet and discover their disagreement. In doing so, two pieces of higher-order evidence are added to the mix: (i) that peer1 is reliable and believes p on the basis of E, and (ii) that peer2 is reliable and disbelieves p on the basis of E. Given that both parties are peers, Kelly claims that (i) and (ii) are to be given equal weight.[[14]](#footnote-14) However, if (i) and (ii) are given equal weight, then their evidential impact would cancel out and at t2 each peer would be rational in believing whatever E supports regarding p. As Kelly then notes, what each peer is rational in believing with regard to p does not change from t1 to t2. At both times the rational attitude is determined by E – the relevant first-order evidence. This is an argument for the Right Reasons view of peer disagreement – where which doxastic attitude is justified is entirely a matter of what the first-order evidence supports. On this view, if one of the peers had correctly evaluated E at t1, then no doxastic change is required. She can remain steadfast. If one of the peers misevaluated E at t1, then a doxastic change is required, but not due to the new higher-order evidence, simply because her attitude does not fit the first-order evidence.[[15]](#footnote-15)

While it is plausible that (i) and (ii) are to be given equal weight given that both parties are peers, there is good reason to think that the canceling out of this higher-order evidence has a much greater impact than Kelly supposes. Supposing that (i) and (ii) are the only relevant pieces of higher-order evidence, than both peers are justified in suspending judgment as to what doxastic attitude E (the shared first-order evidence) supports. Each has strong reason to believe that E supports p, (i), and equally strong reason to believe that E supports not-p, (ii). Many have found it plausible that if you are justified in suspending judgment as to whether your evidence supports p, then you are also justified in suspending judgment toward p. On this account, justified suspension of judgment about what one’s evidence supports is a defeater for any justification one had for believing the target proposition.[[16]](#footnote-16)

This defeat verdict has been motivated in several ways. Feldman (2009) notes that there is a problematic ‘levels incongruity’ in believing a proposition while suspending judgment as to whether your evidence supports that proposition. There is a clear incongruity in believing a proposition while disbelieving that your evidence supports that proposition, and the claim here is that such a defeating effect also applies to a higher-order suspension of judgment.[[17]](#footnote-17) Others have seen such an incongruity as being Moore-paradoxical given the assertions it would license.[[18]](#footnote-18) For instance, if such a levels incongruity could be rational, then one could legitimately assert “p, but I have no idea if my evidence supports p.” Such assertions seem to be infelicitous.

Such an account of the impact of higher-order evidence fits nicely with standard accounts undercutting defeat.[[19]](#footnote-19) A justified suspension of judgment about what one’s evidence supports does not provide evidence for or against p, so it does not provide a rebutting defeater for one’s justification for believing p.[[20]](#footnote-20) Rather, a justified suspension of judgment about what one’s evidence supports attacks the connection between one’s evidence and one’s doxastic attitude toward p. Even if one’s first-order evidence in fact supports p (perhaps even supports it strongly), a justified suspension of judgment about this support relation prevents this first-order evidence from doing its justificatory work. For instance, suppose a graduate student is working on a complicated logical proof. Suppose her proof is in fact sound, but she sends it out to several of her professors for confirmation. Without any being able to elaborate on their answers she receives a mixed response. Half of those who responded claimed that the proof was sound and half said that it was not. Before she is able to gain any other information, let’s suppose that she is justified in suspending judgment about whether the premises of the proof entail the conclusion, even though as a matter of fact, they do. Given this, it is plausible that she has an undercutting defeater for any justification she had for believing the conclusion on the basis of these premises. Such a story closely parallels familiar accounts of undercutting defeat, like where one learns that there is a red light shining on a table that looks red. The information about the red light does not tell on the question of whether the table is red, but it does prevent the visual evidence of a red-looking table from justifying a belief that the table is red.[[21]](#footnote-21) It is evidence that the perceptual evidence is not indicative of the truth of the matter.[[22]](#footnote-22)

A second argument for a ‘no’ answer to Q1 is found in Maria Lasonen-Aarnio (2014), and her argument directly challenges the account of higher-order defeat given above. Lasonen-Aarnio argues that accounts of higher-order defeat lead to a deep puzzle and the best solution to this puzzle is to abandon the notion of higher-order defeat, and defeat talk more generally.[[23]](#footnote-23) Lasonen-Aarnio puts the puzzle as follows,

Assume first a view on which all rational doxastic responses are the results of applying correct epistemic rules. Then, there must be a correct epistemic rule telling Suzy to suspend judgment in p. But since circumstances C still obtain, there is also a correct epistemic rule, rule R, still telling Suzy to believe p. The upshot is that there is a correct epistemic rule urging Suzy to believe p in her present circumstances, and there is a -correct rule urging her not to believe p in her present circumstances. If correct rules are accompanied by oughts, it looks like Suzy ought to believe p, and she ought to suspend judgment in p. Exactly how should we conceive of the structure of correct rules that make incompatible recommendations, and exactly how should we think of the normative force of these rules? (2014; 328-9)

As Lasonen-Aarnio sees it, there are four possible solutions to the puzzle:

*Option 1*: maintain there is an Uber-rule that prescribes a correct doxastic response to every possible circumstance.

*Option 2*: maintain that there are true epistemic dilemmas where irrationality is inevitable.

*Option 3*: maintain that there is a hierarchical structure to the epistemic rules that rules out dilemmas.

*Option 4*: deny the possibility of higher-order defeat.

Option 1 is rejected since it amounts to endorsing an epistemic error theory. Because the uber-rule would be so unlike any of the epistemic rules we take there to be, opting for Option 1 comes with rejecting all the plausible epistemic rules. Further, it seems that the uber-rule would be an infinitely detailed and complicated rule, ill-suited to guiding human agents in their doxastic lives.

According to Option 2, each level has its own genuine rule that gives a prescription as to what one ought to believe and neither rule is trumped by any other rule. So, regardless of one’s doxastic response it will be irrational since it will violate one of these rules. Option 2 is rejected for parallel reasons to why moral dilemmas are rejected. Further, it does not appear that this option really captures higher-order defeat anyway. There is some sense in which higher-order defeat occurs, since the higher-order rule prescribes abandoning the belief, but there is another sense in which higher-order defeat does not occur since the first-order rule’s prescriptions are not affected by the higher-order rule’s prescriptions.

According to Option 3, the correct epistemic system is comprised of a set of rules and an accompanying weighting of those rules. The weighting of the rules prevents epistemic dilemmas from arising. Option 3 is rejected since it is not clear that it really differs in the end from Option 1. While Option 3 comes with an epistemic structure that is denied by Option 1, the worries about excessive complexity and a lack of guidance remain.

According to Option 4, levels incongruity can be rational. It can be rational to be believe p and believe that your evidence does not support p (or suspend as to whether your evidence supports p); rational epistemic akrasia is possible.[[24]](#footnote-24) On this option, misleading higher-order evidence is possible.[[25]](#footnote-25) So, on Option 4, the account given above regarding higher-order defeat fails. Given the flaws with Options 1-3, Lasonen-Aarnio argues that we should endorse Option 4.

There are a few points to make in response to this argument. First, there is good reason to believe that Option 1 is not as problematic as it has been made out to be (if it is even problematic at all). According to Option 1, there is an uber-rule that gives a prescription for what one should believe in every circumstance. Such a view has been defended by Feldman (2009), though not in the context of this particular argument, who claims that, “there are no true general and widely applicable principles governing epistemic disagreements” (303) and that “no principle short of the general evidentialist principle is going to be correct.” (301).[[26]](#footnote-26) According to the evidentialist principle, a subject is justified in adopting the doxastic attitude that their total evidence supports toward the target proposition. Note that the evidentialist principle does not give incompatible prescriptions in the puzzle case. Since the subject’s total evidence has changed, she is no longer in the situation that gave the original prescription. Since the relevant circumstances are the subject’s total evidence and her total evidence has changed, the former prescription no longer holds.

Feldman’s reasoning is that in cases of disagreement the particular details of an individual case are going to matter, so any principle that is going to build all of these details into the antecedent will be quite complex. Further, if such a principle is to cover a multitude of cases, the principle will be exceedingly complex. So, if we are after truth and generality for such a principle, we can’t do better than the prescription to believe in accordance with your total evidence. This is a kind of epistemic particularism[[27]](#footnote-27) since different individuals will have different particular bodies of evidence at different times, and what they should believe will be determined by those bodies of evidence. That said, this view does not entail that there are no informative things that can be said about the epistemology of disagreement. As Feldman claims, such a view leaves open that there are truths about the evidential impact of learning of a disagreement – truths about the impact of higher-order evidence. (295) Even if there is no true general principle about disagreement, we can still give answers to Q1, Q2, and Q3, and doing so can shed light on the epistemology of disagreement even if those answers fail to give universal prescriptions or a universal principle that gives concrete verdicts in all cases.[[28]](#footnote-28) So, there are good reasons to think that Option 1 is not problematic.

Are there reasons to prefer Option 1 to Option 4? We’ve seen some good reason above to maintain that higher-order defeat exists. Our examination of core cases of disagreement and the effects of similar higher-order evidence gave good reason to believe that higher-order defeat exists. It’s worth brining up several further reasons to opt for Option 1 over Option 4. Recall the case of Norman the Clairvoyant.[[29]](#footnote-29) The case of Norman raises a challenge for reliabilist accounts of justification. A prominent response to such a case is that Norman has a defeater for his belief.[[30]](#footnote-30) Such a response is particularly plausible if we consider Norman contemplating his belief and the process that formed it and coming to the justified conclusion that he that it is as likely as not that his belief is reasonable (or produced by a reliable process). Such reflections seem to make a difference for what Norman is reasonable in believing. Opting for Option 4 dismisses the impact of these higher-order considerations and so comes at a cost. From the subject’s perspective, being justified in suspending judgment about what your evidence supports puts you in the same epistemic situation as Norman – while you may have something going for your belief, you are justified in suspending judgment about whether you do.[[31]](#footnote-31)

Additional motivation for preferring Option 1 to Option 4 comes from thinking about rational persuasion. Adam Elga (2005) presents the following scenario that makes the problem sharp.

My friend Daria believed in astrology. For example, she thought that because of her astrological sign she was going to be particularly lucky over the next few weeks. That was bad enough. But when I tried to persuade her that astrology is unfounded, I discovered something even worse. I gave Daria evidence against astrology – studies showing that the position of the distant stars at the time of one’s birth has no bearing on one’s personality or prospects. Daria agreed that the studies were significant evidence against the truth of astrology, and that she had no countervailing evidence of comparable strength. But that was not the end of the matter. ‘‘I still believe in astrology just as much as I did before seeing the studies,’’ she said. ‘‘Believing in astrology makes me happy.’’ I was floored. Daria’s original belief in astrology was less than perfectly reasonable. But this – believing in astrology even though by her own lights the evidence went against it – was an insult to rationality. And it was no excuse that her belief in astrology made her happy. (2005; 115)

In this case Daria has levels incongruity. If such levels incongruity can be rational, like Option 4 maintains, then demonstrating that Daria’s evidence does not support astrology does nothing to affect whether she should believe astrology.[[32]](#footnote-32) This seems like the wrong result. Showing Daria that her evidence does not support her belief appears to be the exactly right course of action to take to show her that her belief is not justified. The cumulative case here provides good reason to opt for Option 1 and adopt a ‘yes’ answer to Q1.

When it comes to Q2, the standard answer is that peer opinions are to be given equal weight. If two individuals are epistemically equally well positioned with regard to some proposition (if they are equally likely to get it right), then their judgments are equally strong pieces of evidence. The Equal Weight view of disagreement is most closely connected to this claim about weighting, but it is by no means exclusive to that view. Endorsing that peer opinions are to be weighted equally is compatible with a number of different views of the epistemic significance of disagreement. What will matter here is how this piece of higher-order evidence interacts with one’s first-order evidence; it will depend on how Q3 is answered.

Seeing evidence of a peer disagreement as higher-order evidence that acts as a defeater, and weighing peer opinions as equally strong pieces of higher-order evidence is not yet to commit you to a particular view about the epistemic significance of disagreement. A further central question regards how these pieces of higher-order evidence interact with one’s first-order evidence. In particular, it will matter what pieces of evidence can themselves defeat this higher-order evidence. Defeaters are themselves capable of being defeated, so we must address what can defeat the higher-order evidence coming from disagreement.

A natural starting point is David Christensen’s Independence principle.[[33]](#footnote-33)

In evaluating the epistemic credentials of another’s expressed belief about P, in order to determine how (or whether) to modify my own belief about P, I should do so in a way that doesn’t rely on the reasoning behind my initial belief that P. (2009, 758)

According to this principle, the first-order evidence in question cannot itself defeat the higher-order evidence concerning it. Any defeater for the higher-order evidence coming from disagreement must be independent of the disagreement itself. So, candidate defeaters would be evidence that the other party is more likely (than you) to be mistaken on this occasion (evidence that they are not in fact you peer) or third-party evidence (evidence that other peers/experts evaluate things the same way that you do. So, all of these defeater-defeaters give reason to believe that the disagreement is better explained by positing error to the other party. It is worth noting that all such defeater-defeaters will be pieces of higher-order evidence – they will be information about the quality of the higher-order evidence that is the peer’s opinion on the matter.

Motivation for the Independence principle comes from thinking about the kind of reasoning its denial would permit. For instance, I cannot rationally conclude that my peer must be mistaken on this occasion simply because he disagrees with me. Returning to the Restaurant Check case, I should not reason as follows, “my peer believes that the shares are $45, but they aren’t, so my friend is mistaken and I’m correct.” In order to rationally demote my friend, I would need to have some independent reason to think that the disagreement is better explained by him having made an error, like that he is particularly biased on this issue, he had much more to drink at dinner, and so forth. These considerations were not the basis of my own belief about the shares, so they are open to be used in navigating the disagreement.[[34]](#footnote-34)

With this answer to Q3 in hand, we can formulate the Equal Weight view of disagreement. The Equal Weight view is committed to the following three claims, each of which provides an answer to one of our initial three questions:

*Defeat*: Learning that a peer disagrees with you about P gives you a reason to believe you are mistaken about P.

*Equal Weight*: The reason to think you are mistaken about P coming from your peer’s opinion about P is just as strong as the reason to think you are correct about P coming from your opinion about P.

*Independence*: Reasons to discount your peer’s opinion about P must be independent of the disagreement itself.[[35]](#footnote-35)

According to the Equal Weight view, in a two-party peer disagreement both parties gain a reason to ‘split-the-difference’ and adopt the doxastic attitude that is the mean of the two initial attitudes.[[36]](#footnote-36) On such a picture, the doxastic attitude that it is rational to have in the face of peer disagreement is entirely a matter of the higher-order evidence. For instance, if peer1 has a 0.8 degree of belief that p and peer2 has a 0.2 degree of belief that p, upon discovering their disagreement, each gains a reason to adopt a 0.5 degree of belief that p. This result is determined entirely by averaging their initial attitudes (the higher-order evidence). What their shared first-order evidence supports (and to what degree) entirely drops out of the picture.

Some have seen this consequence as implausible since it would permit a kind of bootstrapping.[[37]](#footnote-37) Consider the following:

BOOTSTRAPPING

At time t0, each of us has access to a substantial, fairly complicated body of evidence. On the whole this evidence tells against hypothesis H: given our evidence, the uniquely rational credence for us to have in H is 0.3. However, as it happens, both of us badly mistake the import of this evidence: you adopt a 0.7 degree of belief toward H while I adopt a 0.9 degree of belief. At time t1, we meet and compare notes and we then split the difference and converge on a 0.8 degree of belief. (Kelly 2010, 125–126)

Kelly finds it implausible that the higher-order evidence could result in a 0.8 degree of belief toward H being rational. On such a picture, the justificatory import of the original first-order evidence entirely vanishes. Things might seem even worse in a single person case. Suppose that my evidence supports a 0.3 degree of belief that H, but I happen to misevaluate that evidence and come to form a 0.8 degree of belief that H. Having done so, I reflect on my response to my evidence and gain some higher-order evidence. If such higher-order evidence swamps my first-order evidence, it looks like I can thereby become rational in holding my 0.8 degree of belief that H. Since, by stipulation, such a response to my first-order evidence was irrational, this may seem like a costly consequence. For this reason, Kelly maintains that one’s first-order evidence can exert an upward epistemic push and rejects the Equal Weight view for his Total Evidence view. [[38]](#footnote-38),[[39]](#footnote-39)

In evaluating these consequences it is important to not confuse the subject’s first-order evidence with the subject’s total body of evidence. In each of the cases the subjects responded poorly to their first-order evidence, which initially we can suppose, was their total evidence on the mater. However, in each case, our subjects then acquire some higher-order evidence. This higher-order evidence gives the subjects strong reason to believe that a 0.8 degree of belief is the rational response to their first-order evidence. After all, the subjects learn how a reliable evaluator of the evidence has judged it. As we know, this higher-order evidence is misleading evidence, but misleading evidence is evidence nevertheless. It is not implausible, then, that the rational attitude for the subjects to have in response to their total body of evidence (which includes the misleading higher-order evidence) is a 0.8 degree of belief that H. In these cases, the support that the first-order evidence gives toward H has not changed, but our subjects have gained new evidence, and adding this new (misleading) evidence into their total body of evidence can dramatically change what attitude their total body of evidence supports.[[40]](#footnote-40) This is illustrated by the following case:

UNFORTUNATE MATHMATICIAN

S goes through what seems to him to be a valid proof from the sole premise E to the conclusion that p. S has in fact made a subtle error in his proof, even though he has checked his work several times. Nevertheless, S can be justified in believing p on the basis of E.[[41]](#footnote-41)

Intuitively the mathematician is justified in his belief despite the fact that he has misjudged his first-order evidence. Since he has powerful higher-order evidence concerning his ability to successfully complete such proofs, his total evidence can support believing p even though his first-order evidence, E, does not do so.

The Independence principle has been challenged in other ways as well. According to Jennifer Lackey’s Justificationist view, when one has very high antecedent justification for believing the target proposition, the higher-order evidence gained from learning of a peer disagreement does not have its defeating effect. For instance, consider the following extreme disagreement:

ELEMENTARY MATH

Harry and I, who have been colleagues for the past six years, were drinking coffee at Starbucks and trying to determine how many people from our department will be attending the upcoming APA. I, reasoning aloud, say, ‘Well, Mark and Mary are going on Wednesday, and Sam and Stacey are going on Thursday, and since 2+2=4, there will be four other members of our department at that conference.’ In response, Harry asserts, ‘But 2+2 does not equal 4.’ (Lackey 2010, 283)

Lackey maintains that in such a case she remains justified in believing that 2+2=4, despite learning of the fact that her peer Harry disagrees. While such a verdict is plausible, one can maintain it without abandoning Independence. For instance, while the higher-order evidence that comes from learning about Harry may be quite weighty, his is not the only known peer opinion on the topic. Knowing about the vast agreement of peers and experts regarding the sum of 2 and 2, provides ample higher-order evidence that soundly defeats the evidence coming from Harry. Since the opinions of others are independent from one’s own assessment of the matter, they can be independently appealed to in dealing with the disagreement. Absent the information about others, the case loses its desired verdict.[[42]](#footnote-42)

Further, revisiting the connection between higher-order defeat and undercutting defeat lends additional credence to the claim that the quality of one’s first-order evidence is not relevant to whether defeat occurs. For instance, one could have very strong justification for believing that the table is red coming from their visual perception. However, if our subject becomes justified in believing that there is a red light shining on the table, then the subject acquires a defeater for her belief about the table’s color.[[43]](#footnote-43) If a study produced near conclusive evidence that a new tax bill will be revenue neutral, the justificatory power of such evidence is entirely undermined by sufficient evidence that the study was conducted by a biased group. Referencing how strong the support the study provides is no way to defeat or deflect the information about the study being flawed. The fact that apart from the defeating evidence the study strongly justified believing that the tax bill is revenue neutral is simply not relevant to whether we have the defeating evidence or whether it does its defeating work. Applied to cases of disagreement, Christensen describes the following scenario:

LUCKY LOTTO

You have a ticket in a million ticket lottery. Each ticket is printed with three six-digit numbers that, when added, yield the seven-digit number that is entered into the lottery. Given the odds, I am highly justified in believing that your ticket is a loser, but I nevertheless add the numbers on your ticket just for fun. Having added the numbers and comparing the sum to the winning number—no match—I thereby become even more justified in believing that you did not win. Meanwhile, you are adding up your numbers as well, and comparing them to the winning number. You then exclaim “I won!” (Christensen, 2007, 200)

It is hard to imagine having higher antecedent justification than in the above case, yet it still seems that learning of your friend’s evaluation of things provides you with a defeater for your belief about the ticket. It would be irrational to reject your friend’s claim simply based upon your high antecedent justification.[[44]](#footnote-44)

What one makes of the epistemic significance of disagreement boils down to what one makes of higher-order evidence: whether it affects what it is rational to believe about propositions not themselves about evidence, how strong such evidence is, and under what conditions higher-order evidence is itself defeated. While answers to these questions are all contentious, we have seen reason to believe that in the existence of higher-order defeat and reason to doubt that the first-order evidence in question can itself defeat higher-order evidence.[[45]](#footnote-45)

**References**

Adler, Jonathan (2002). “Akratic Believing?” *Philosophical Studies 1*10: 1-27.

Bergmann, Michael (2005). “Defeaters and Higher-Level Requirements.” *Philosophical Quarterly* 55 (220): 419–436.

BonJour, Laurence. 1980. 'Externalist Theories of Empirical Knowledge'. *Midwest Studies in Philosophy* 5:53-73.

DiPaolo, Joshua (forthcoming). “Higher-Order Defeat is Object-Independent.” *Pacific Philosophical Quarterly*.

Christensen, David (2016). “Disagreement, Drugs, Etc.: From Accuracy to Akrasia.” *Episteme: A Journal of Social Epistemology* 13 (4):397-422.

Christensen, David (2011). “Disagreement, Question-Begging and Epistemic Self-Criticism,” *Philosophers Imprint* 11(6): 1-22.

Christensen, David (2010). “Higher-Order Evidence.” *Philosophy and Phenomenological Research* 81 (1):185-215.

Christensen, David. (2007a) “Epistemology of Disagreement: The Good News.” *Philosophical Review* 116: 187-218.

Christensen, David. (2007b) "Does Murphy's Law Apply in Epistemology? Self-Doubt and Rational Ideals." *Oxford Studies in Epistemology* 2: 3 - 31.

Christensen, David, “Disagreement as Evidence: The Epistemology of Controversy.” *Philosophy Compass* 4:5 (2009): 756-767.

Coates, Adam (2012).“Rational Epistemic Akrasia,”*American Philosophical Quarterly* 49, 113–124.

DiPaolo, Joshua (2016). “Higher-Order Defeat is Object-Independent.” *Pacific Philosophical Quarterly*. doi: 10.1111/papq.12155.

Elga, Adam (2007). “Reflection and Disagreement.” Nous 41(3).

Elga, Adam (2005). “On Overrating Oneself … and Knowing It.” *Philosophical Studies* 123: 115-124.

Greco, Daniel. (2014).“A Puzzle About Epistemic Akrasia.” *Philosophical Studies* 167, 201–219

Feldman, Richard (2009). “Evidentialism, Higher-Order Evidence, and Disagreement.” *Episteme: A Journal of Social Epistemology* 6 (3):294-312.

Feldman, Richard (2006). “Reasonable Religious Disagreements” in Louise Antony, ed., *Philosophers without Gods:* *Meditations on Atheism and the Secular Life*. New York: Oxford University Press.

Field, Claire (2017). “It’s OK to Make Mistakes: Against the Fixed Point Thesis.” Episteme.

Frances, Bryan and Jonathan Matheson (2018). “Disagreement.” Stanford Encyclopedia of Philosophy.

Frances, Bryan (2010). “The Reflective Epistemic Renegade.” *Philosophy and Phenomenological Research* 81(2): 419-463.

Hazlett, Allan (2012). “Higher-Order Epistemic Attitudes and Intellectual Humility.” *Episteme: A Journal of Social Epistemology* 9 (3): 205-223.

Hookway, Christopher (2001). “Epistemic Akrasia and Epistemic Virtue.” In Abrol Fairweather & Linda Trinkaus Zagzebski (eds.), *Virtue Epistemology: Essays on Epistemic Virtue and Responsibility*. Oxford University Press, 178-99.

Horowitz, Sophie (2014). “Epistemic Akrasia.” *Nous* 48(4): 718-744.

Huemer, Michael (2011), “The Puzzle of Metacoherence.” *Philosophy and Phenomenological Research* 82:1, 1-21.

Huemer, Michael (2002), “Fumerton’s Principle of Inferential Justification” *Journal of Philosophical Research* 28: 329-340.

Kelly, Thomas (2014). ‘Believers as Thermometers.’ In J. Matheson and R. Vitz (Eds.), *The Ethics of Belief: Individual and Social*. New York: Oxford University Press, 301–314.

Kelly, Thomas (2010). “Peer Disagreement and Higher Order Evidence.” In Alvin I. Goldman & Dennis Whitcomb (eds.), *Social Epistemology: Essential Readings*. Oxford University Press, 183--217.

Kelly, Thomas (2005). “The Epistemic Significance of Disagreement.” In John Hawthorne & Tamar Gendler (eds.), *Oxford Studies in Epistemology, Volume 1*. Oxford University Press, 167-196.

Lackey, Jennifer. (2008). “A Justificationist View of Disagreement’s Epistemic Significance.” In Alan Millar Adrian Haddock & Duncan Pritchard (eds.), *Social Epistemology*. Oxford University Press, 145-154.

Lackey, Jennifer. (2010). “What Should We Do When We Disagree?” In Tamar Szabó Gendler & John Hawthorne (eds.), *Oxford Studies in Epistemology vol. 3*. Oxford University Press, 274-93.

Lasonen-Aarnio, Maria. (2014). “Higher-Order Evidence and the Limits of Defeat.” *Philosophy and Phenomenological Research* 88 (2):314-345.

Littlejohn, Clayton (forthcoming). “Stop Making Sense? On a Puzzle about Rationality.” *Philosophy and Phenomenological Research*.

Matheson, Jonathan (2009). “Conciliatory Views of Disagreement and Higher-Order Evidence.” *Episteme: A Journal of Social Epistemology* 6(3): 269-279.

Matheson, Jonathan (2016). *The Epistemic Significance of Disagreement*. Palgrave.

Pollock, John, and Joseph Cruz (1999). *Contemporary Theories of Knowledge* 2nd ed. New York: Roman & Littlefield.

Rasmussen, Mattias Skipper. (forthcoming) “Higher-Order Defeat and the Impossibility of Misleading Self-Order Evidence.” in Higher-Order Evidence: New Essays, M. Skipper and A. Steglich-Petersen (eds.), Oxford: Oxford University Press.

Rasmussen, Mattias Skipper. (ms) “Higher-Order Defeat Without Epistemic Dilemmas.”

Rasmussen, Mattias Skipper. (ms) “Reconciling Enkrasia and Higher-Order Defeat.”

Rasmussen, Mattias Skipper, Steglich-Petersen, Asbjørn & Bjerring, Jens Christian (forthcoming). “A Higher-Order Approach to Disagreement.” *Episteme: A Journal of Social Epistemology* 1-21.

Schoenfield, Miriam (2016). “”An Accuracy Based Approach to Higher Order Evidence.” *Philosophy and Phenomenological Research*.

Silva, Paul (forthcoming). “How Doxastic Justification Helps Us Solve the Puzzle of Misleading Higher-Order Evidence.” *Pacific Philosophical Quarterly*.

Sliwa, Paulina and Horowitz, Sophie (2015) “Respecting All the Evidence.” *Philosophical Studies* 172 (11): 2835-2858.

Smithies, Declan (2012). “Moore’s Paradox and Accessibility of Justification.” *Philosophy and Phenomenological Research* 85(2): 273-300.

Sosa, Ernest (2010). “The Epistemology of Disagreement.” In R. Feldman and T. Warfield (eds.), *Disagreement*. New York: Oxford University Press.

Talbott, William (2016). “A Non-Probabilist Principle of Higher-Order Reasoning.” Synthese 193(10).

Titelbaum, Michael (2015). “Rationality’s Fixed Point (or: In Defense of Right Reason).” In Gendler and Hawthorne (eds.) *Oxford Studies in Epistemology* vol. 5.

Vahid, Hamid (2015). “Epistemic Akrasia, Higher-Order Evidence, and Charitable Belief Attribution.” *International Journal for the Study of Skepticism* 5(4):296-314.

Vavova, Katia (forthcoming). “Irrelevant Influences.” *Philosophy and Phenomenological Research*.

Vavova, Katia (2013). “Confidence, evidence, and disagreement.” *Erkenntnis* 79(1), 173–183.

Worsnip, Alex (forthcoming). “The Conflict of Evidence and Coherence.” *Philosophy and Phenomenological Research*.

1. This follows Matheson (2016). This formulation leaves open what factors put one in a better epistemic position, or make one more likely to be correct, but evidence, intelligence, and intellectual virtue are commonly recognized factors. [↑](#footnote-ref-1)
2. For two examples, see Feldman’s (2006) Dean on the Quad Case and Christensen’s (2007a) case of two independently conducted surveys that were equally well done. [↑](#footnote-ref-2)
3. An analogy here is that it can often be difficult to tell which of two individuals is older, even though it is highly unlikely that they have been alive for exactly the same amount of time. [↑](#footnote-ref-3)
4. It is worth noting that there is no common and precise account of either higher-order evidence or first-order evidence. While there is broad agreement about the paradigm cases of first-order evidence and higher-order evidence, analyses of these concepts are quite vague and imprecise. [↑](#footnote-ref-4)
5. These are all examples of what we might call ‘negative higher-order evidence’ since they question the merits of one’s first-order evidence, but higher-order evidence can also be positive. Information about cognitive enhancements or agreement are examples of higher-order evidence that speaks positively about one’s first-order evidence or one’s evaluation of it. For an example of positive higher-order evidence, see Skipper-Rasmussen (forthcoming). [↑](#footnote-ref-5)
6. Of course, you also have evidence that your peer has misjudged what your shared evidence supports. [↑](#footnote-ref-6)
7. Putting things this way assumes the Uniqueness Thesis. According to the Uniqueness Thesis every body of evidence justifies at most one competitor doxastic attitude toward any given proposition. However, even if Uniqueness Thesis is false, learning of a disagreement with an evidentially equal peer still provides you with higher-order evidence. For one thing, it could provide you with evidence that your shared evidence supports distinct doxastic attitudes toward the same proposition since each of you is equally likely to evaluate the evidence well and each of you have responded to the evidence by adopting distinct doxastic attitudes toward the target proposition. [↑](#footnote-ref-7)
8. Clearly there is a sense in which your bodies of evidence cannot be equally good since one of the bodies of evidence is misleading. The sense of ‘equally good’ relevant here is that each provides the same quantity and quality of support to the relevant attitude. See the cases mentioned in note 2. [↑](#footnote-ref-8)
9. These questions follow those used in Matheson (2015) to distinguish the main views on the epistemology of disagreement. [↑](#footnote-ref-9)
10. This follows Pollock and Cruz (1999), 195. [↑](#footnote-ref-10)
11. Steadfast views can give a ‘yes’ answer to Q1 so long as they have it that the defeater gained is always itself defeated by other information. That is, so long as a Steadfast view in question answers Q3 in a certain way, it too can answer ‘yes’ to Q1. [↑](#footnote-ref-11)
12. For a defense of the claim that the impact of higher-order evidence is often agent-relative, see Christensen (2010). [↑](#footnote-ref-12)
13. This response follows Matheson (2009). [↑](#footnote-ref-13)
14. Note that this is an answer to Q2. [↑](#footnote-ref-14)
15. Kelly (2010) rejects this canceling out argument and the Right Reasons view in favor of the Total Evidence view. Kelly claims that since a greater proportion of the total evidence at t2 supports agnosticism toward p (given that (i) and (ii) cancel out), the total evidence at t2 will support p to a lesser degree than E alone does. For a more recent defense of the Right Reasons view, see Titelbaum (2015). [↑](#footnote-ref-15)
16. See Bergmann (2005), Feldman (2005), Matheson (2009; 2015), and Sosa (2010). [↑](#footnote-ref-16)
17. See also Bergmann (2005, p. 419), Feldman (2005, p. 111), and Matheson (2009). We will consider a counterargument in detail below. [↑](#footnote-ref-17)
18. See Huemer (2011). Huemer endorses a metacoherence requirement, that categorically believing that P commits one, on reflection, to the view that one knows that P. See also Sliwa and Horowitz (2015) and Smithies (2012). [↑](#footnote-ref-18)
19. This connection is made in Bergmann (2005, pp. 422-7), Christensen (2010, pp. 193-9), Feldman (2005, p. 104), Huemer (2011, pp. 7-9), and Matheson (2009). This is not to say that there may be important differences between undercutting defeat by way of higher-order evidence and other kinds of undercutting defeat. One issue here is whether higher-order undermining evidence attacks the general connection between one’s first-order evidence and the target proposition, or only in this particular case. For more on this issue, see Feldman (2005) and Christensen (2010). [↑](#footnote-ref-19)
20. Note, such higher-order evidence does provide a rebutting defeater for the proposition <evidence E supports believing p>. [↑](#footnote-ref-20)
21. It’s worth noting that undercutting defeaters appear to obtain when one is justified in suspending judgment regarding the relevant proposition. A justified suspension of judgment about whether there is a red light shining on the table is a defeater for the justification for believing that the table is red coming from my perceptual experience. [↑](#footnote-ref-21)
22. DiPaolo (forthcoming) argues that there are several features that distinguish higher-order defeat from undercutting defeat in general. First, higher-order evidence is *object-independent* in that it does not matter what the content of the belief is. Whether one believed p or believed not-p, the higher-order defeat with nevertheless have its effect. Contrast this with standard cases of undercutting defeat like the red light example. If you believed the table was not red, learning of the light will not provide an undercutting defeater for you. Second, higher-order defeating evidence is *retrospective* in that it gives evidence that one’s belief never was justified, as opposed to evidence that it is simply no longer justified. See also Lasonen-Aarnio (2014) on this second point. [↑](#footnote-ref-22)
23. The puzzle motivating Lasonen-Aarnio’s argument is also addressed in Littlejohn (forthcoming), Silva (forthcoming), Sliwa & Horowitz (2015), and Worsnip (forthcoming), but they do not all arrive at Lasonon-Aarnio’s proposed solution. [↑](#footnote-ref-23)
24. Some have doubted whether epistemic akrasia is even possible. See Adler (2002) for an argument that it is impossible, and Hookway (2001) for an argument that it is possible. [↑](#footnote-ref-24)
25. For defenses of this option, see Coates (2012), Hazlett (2012), Lasonen-Aarnio (2014), Titelbaum (2015), and Worsnip (forthcoming). Hazlett maintains that a reasonable belief that your evidence is misleading is a defeater, but a reasonable suspension of judgment toward this proposition is not. [↑](#footnote-ref-25)
26. Feldman argues that there is nothing peculiar about disagreement here since it is implausible that there are similar general principles about memory or testimony from newspapers. In each of these cases the details are going to matter. [↑](#footnote-ref-26)
27. This position parallels particularlism in ethics. [↑](#footnote-ref-27)
28. This view may sound like the Total Evidence view, but as I will argue below, there are good reasons to believe that these claims are compatible with several competitor views of the epistemic significance of disagreement. Central to the Total Evidence view is a claim about how first-order evidence and higher-order evidence interact. [↑](#footnote-ref-28)
29. See Bonjour (1980). [↑](#footnote-ref-29)
30. Such a response to the case of Norman the clairvoyant has been endorsed by Goldman (1986, p. 112) and (2011), Plantinga (1996, p. 333), Nagel (2016), and Ghijsen (2016). [↑](#footnote-ref-30)
31. A different response to the puzzle is given by Silva (forthcoming) who argues that appealing to the distinction between propositional and doxastic justification can resolve the puzzle. [↑](#footnote-ref-31)
32. In this case it is doubtful that Daria’s first-order evidence supports astrology, so Option 4 is not committed to maintaining that her belief in astrology is rational. The problem is that Option 4 is committed to the claim that demonstrating that her evidence does not support astrology does not itself do anything to change what it is rational to believe about astrology. [↑](#footnote-ref-32)
33. Principles similar to Independence can be found in Elga (2007), Matheson (2016), and at least implicitly in Frances (2010). [↑](#footnote-ref-33)
34. This follows Christensen (2007; 197-8). Lackey’s (2008, 2010) appeal to personal information also fits here. [↑](#footnote-ref-34)
35. Frances and Matheson (2018) [↑](#footnote-ref-35)
36. The ‘split the difference’ understanding of the Equal Weight view is not uncontroversial. See Rasmussen et. al. (forthcoming). [↑](#footnote-ref-36)
37. See Christensen (2010; 2016), Kelly (2010; 2014), and Sliwa and Horowitz (2015). [↑](#footnote-ref-37)
38. See also Kelly (2014). [↑](#footnote-ref-38)
39. Others, like Christensen, have claimed that while splitting-the-difference might be the rational response to learning of a peer disagreement, whether the resulting doxastic attitude is itself rational will depend upon how one initially responded to the first-order evidence. Christensen (2011) claims that misleading higher-order evidence is rationally toxic since agents possessing it are doomed to fall short of some rational ideal. See also Christensen (2016). [↑](#footnote-ref-39)
40. For more on this line of reasoning, see Matheson (2016). [↑](#footnote-ref-40)
41. Huemer (2002, p. 335). [↑](#footnote-ref-41)
42. For more on this claim see Matheson (2016, ch. 5). [↑](#footnote-ref-42)
43. [REF] [↑](#footnote-ref-43)
44. Part of Lackey’s account involves referencing personal information as well. Typically we have much better information about ourselves than we do about our interlocutors (e.g. I am well rested, I am not on medication, I am not drunk, I am not lying, etc.). However, Independence does not rule out appealing to such information. [↑](#footnote-ref-44)
45. Thanks to Mattias Skipper Rasmussen for helpful comments on this paper. [↑](#footnote-ref-45)