#### Multi-Peer Disagreement and the Preface Paradox

#### Kenneth Boyce and Allan Hazlett

One problem in the epistemology of disagreement (Kelly 2005, Feldman 2006, Christensen 2007) concerns **peer disagreement**, and the reasonable response to a situation in which you believe p and disagree with an "epistemic peer" of yours (more on which notion in a moment), who believes ~p. Another (Elga 2007, pp. 486-8, Kelly 2010, pp. 160-7) concerns **serial peer disagreement**, and the reasonable response to a situation in which you believe p1 ... pn and disagree with an "epistemic peer" of yours, who believes ~p1 ... ~pn. A third, which has been articulated by Peter van Inwagen (2010, pp. 27-8) concerns **multi-peer disagreement**, and inquires about the reasonable response to a situation in which you believe p1 ... pn and disagree with a group of "epistemic peers" of yours, who believe ~p1 ... ~pn, respectively. We shall argue, however, that the problem of multi-peer disagreement is a variant on the preface paradox, and that because of this (*pace* van Inwagen) the problem poses no challenge to the so-called "steadfast view" in the epistemology of disagreement.

We shall define some terminology (§1), present van Inwagen's challenge to the "steadfast view" (§2), present and diagnose the preface paradox (§3), argue that van Inwagen's challenge relies on the same principle that generates the preface paradox (§4), and discuss the reasonable response to multi-peer disagreement (§5). Our aim is modest: it is to defend the "steadfast view" against one particular objection; we set aside other objections to the "steadfast view,"<sup>1</sup> as well as positive arguments in its favor.

# 1 Preliminaries

The **steadfast view** says that it is sometimes reasonable to believe p in the face of peer disagreement about p. The notion of an "epistemic peer" and the notion of "believing p in the face of peer disagreement about p" require articulation.

The notion of an "epistemic peer" is a technical notion, developed by epistemologists to describe a particular species of disagreement. Some writers understand this terminology such that two people are peers when they are equals in epistemic virtue, or when it comes to the epistemic virtues relevant to some topic (Gutting 1982, p. 83, cf. Bergmann 2009, p. 336). Equality of virtue could be understood in terms of a list of paradigm virtues, e.g. "general epistemic virtues such as intelligence, thoughtfulness, and freedom from bias" (Kelly 2005, p. 175), sincerity in seeking the truth (Bergmann 2009, p. 336), or openmindedness, intellectual integrity, intellectual honesty, and so on (cf. Gutting, op. cit.). Alternatively, equality of virtue might be understood in externalist terms, e.g. as requiring equal reliability, or equal reliability when it comes to some topic (Elga 2007, p. 499, Kelly 2010, p. 112). Finally, we might require both equality of virtue and that peers be equals when it comes to evidence, again perhaps relative to some topic (Kelly 2005, pp. 174-5). We will assume that two people are **epistemic peers** (relative to some topic) only if they are (roughly) equally reliable (when it comes to that topic). Thus, given this assumption, evidence of a would-be peer's lesser reliability is evidence that she is not, after all, your peer.

<sup>&</sup>lt;sup>1</sup> For example, we discuss neither the objection from arbitrariness (White 2005, Feldman 2006; cf. Kelly 2005, 2010) nor the objection from the illegitimacy of bootstrapping (Elga 2007, pp. 486-8; cf. Kelly 2010, pp. 160-7, Weisberg 2010).

We'll say that someone **believes p** in the face of peer disagreement about **p** iff she believes **p** and believes that an epistemic peer believes  $\sim p$ .

Although the steadfast view says that it is *sometimes* reasonable to believe p in the face of peer disagreement about p, we'll grant for the sake of argument that the steadfast view is committed to saying that it is *always* reasonable to believe p in the face of peer disagreement about p. We'll argue that van Inwagen's challenge (§2) fails, even against this implausibly strong variant of the steadfast view.

# 2 Van Inwagen's challenge

Van Inwagen (2010) asks you to imagine a case of philosophical disagreement between yourself, a defender of "Ism," and "Nisimists," where your belief in Ism is based on an apparent entailment that Nisimists do not grant. You know that the Nisimists are your epistemic peers. Van Inwagen considers the following line of line of reasoning, in defense of maintaining your own view in such a case:

It is not that my cognitive faculties function better than theirs. Theirs are as reliable as mine. But theirs are not identical to mine, and, in this case, some accidental feature of my cognitive architecture has enabled me to see the entailment that is hidden from the Nismists. (2010, p. 27)

So far, this is in line with the steadfast view. And so far this sounds unobjectionable. As Thomas Kelly (2005) argues:

[A] revision in my assessment of our relative levels of competence is in no way mandated by the judgement that one of us has proven superior with respect to the exercise of our competence on a given occasion. Two chess players of equal skill do not always play to a draw; sometimes one or the other wins, perhaps even decisively. (p. 179)

However, van Inwagen argues that there is a problem with the steadfast view:

I accept *lots* of philosophical propositions that are denied by many able, well-trained philosophers. Am I to believe that in every case in which I believe something many other philosophers deny ... I am right and they are wrong, and that, in every such case, my epistemic circumstances are superior to theirs? Am I to believe that in every such case this is because some neural quirk has provided me with evidence that is inaccessible to them? If I do believe this ... is it the same neutral quirk in each case or a different one? If it is the same one, it begins to look more a case of "my superior cognitive architecture" [but i]f it is a different one in each case – well, that is quite a coincidence, isn't it? All these evidence-provoking quirks come together in one person, and that person happens to be me. (2010, p. 27)

Van Inwagen here schematically describes a case of multi-peer disagreement, and his point is that it would be unreasonable to think, in such a case, either that I have cognitive architecture that is superior to that of all of my would-be peers, in which case they are not really my peers after all (cf. §1), or that some coincidence has led to my being right all the time, in every would-be peer disagreement to which I am party. And so the

argument must have gone wrong somewhere, and the culprit seems to be the steadfast view.  $^{\rm 2}$ 

Let's articulate this schematic argument a bit more formally. Assume, for reductio, the steadfast view (§1): it is always reasonable to believe p in the face of epistemic peer disagreement about whether p. Imagine, then, that you know that S1 is an epistemic peer of yours, and that you believe q1 and S1 believes  $\sim$ q1. If you are permitted to continue to believe q1, as the steadfast view implies, then it seems that you can permissibly reason as follows:

The proposition q1 is true, and I believe q1 while S1 believes  $\sim$ q1. Therefore, my belief (about q1) is true and S1's belief (about q1) is false.

But now consider *all* the peer disagreements to which you are a party. You disagree with S2 about q2, with S3 about q3, and so on. You disagree with S1 ... Sn about q2 ... qn, respectively. If you are permitted to continue believing q2 ... qn, as the steadfast view implies, then it seems that you can permissibly reason in an analogous way, in each individual case of disagreement:

The proposition q2 is true, and I believe q2 while S2 believes  $\sim$ q2. Therefore, my belief (about q2) is true and S2's belief (about q2) is false.

• • •

The proposition qn is true, and I believe qn while Sn believes  $\sim$ qn. Therefore, my belief (about qn) is true and Sn's belief (about qn) is false.

You now seem to be in a position to permissibly reason as follows:

Therefore, in all of my would-be peer disagreements with S1 ... Sn, I am right and my would-be peer is wrong. But this is true of none of S1 ... Sn: each of them is wrong in at least one of their would-be peer disagreements, namely, in their disagreement with me. Either (i) this disparity is explained by the fact that S1 ... Sn are not my epistemic peers, or (ii) this disparity is an unlikely coincidence.

Therefore, you may reasonably believe that either your would-be peers are in fact your epistemic inferiors or that the relevant disparity is an unlikely coincidence. But this seems an unreasonable thing to believe. It would be dogmatic to insist, in the face of disagreement with multiple would-be peers, that your would-be peers are in fact your epistemic inferiors, and absurd to suppose that the relevant disparity is an unlikely coincidence. The culprit, so the argument goes, is the steadfast view, which implies our permission to continue believing q1 ... qn in the face of our peer disagreements with S1 ... Sn.

# 3 The preface paradox and multi-premise closure

 $<sup>^{2}</sup>$  N.b. that van Inwagen does not endorse this conclusion: he is inclined towards the steadfast view, but finds himself in the "predicament" or being "unable to answer" this challenge (p. 28).

We'll argue that van Inwagen's challenge requires the same principle that generates the **preface paradox**. Here's an articulation of the latter (cf. Makinson 1965). An author has just finished a meticulously researched book, which asserts the propositions  $q1 \dots qn$ . However, she also knows that even meticulously researched books are rarely error-free, and admits that her book probably contains some errors, i.e. that some of her assertions are false. However, her assertion of each of  $q1 \dots qn$  seems to commit her to their conjunction – and that is inconsistent with the assertion that some of  $q1 \dots qn$  are false.

The paradox can be articulated at the level of belief rather than at the level of assertion. Imagine that the author is sincere, and she believes each of  $q1 \dots qn$ . Because of her meticulous research, each of these beliefs is reasonable. But if she reasonably believes each of  $q1 \dots qn$ , then she seems committed to believing their conjunction. And so it seems reasonable for her to believe their conjunction. But if it reasonable to believe that, then it seems reasonable to believe that none of her beliefs in each of  $q1 \dots qn$  is false. And yet it is plausible that humility requires believing that some of those beliefs are false, and thus it seems reasonable for the author to believe that some of her beliefs are false. But we have arrived at the seemingly absurd conclusion that it reasonable for the author to believe that some of her beliefs are false.

We'll argue (§4) that van Inwagen's challenge (§2) requires the same principle that generates the preface paradox, namely:

**Multi-premise closure for reasonable belief:** (For all S, p1 ... pn, q) If it is reasonable for S to believe each of p1 ... pn, and reasonable for S to believe that p1 ... pn together entail q, then it is reasonable for S to believe q.

We imagined that the author reasonably believes each of  $q1 \dots qn$ , and we assumed that it is reasonable for her to believe that these together entail that none of said beliefs is false. Multi-premise closure is the principle we need to generate the objectionable conclusion that it is reasonable for the author to believe that none of her beliefs in each of  $q1 \dots qn$  is false. By saying that multi-premise closure is needed to generate the objectionable conclusion, we mean that if multi-premise closure is false, then we are free to reject the inference to the objectionable conclusion.

# 4 Van Inwagen's challenge and multi-premise closure

But multi-premise closure is also needed for a crucial move in the problematic reasoning described in van Inwagen's challenge (§2). We imagined that, for each of the qi, you were reasonable in believing:

(I) My belief about qi is true and Si's belief about qi is false.

And we assumed that, from these beliefs, you could reasonably infer:

(II) In all of my would-be peer disagreements with S1 ... Sn, I am right and my would-be peer is wrong.

After all, your type-(I) beliefs, together, obviously entail (II). Multi-premise closure is the principle we need to generate the objectionable conclusion that it is reasonable for you to believe (II), given the reasonableness of your type-(I) beliefs. By this we mean that if

multi-premise closure is false, then we are free to reject the inference from the reasonableness of your type-(I) beliefs, to the reasonableness of your believing (II). There is no need to conclude that, in all of your would-be peer disagreements, you are right and your would-be peer is wrong. In general, the steadfast view does not imply that, in cases of multi-peer disagreement, it is reasonable for you to believe that, in every case, you are right and your would-be peer is wrong. And without this conclusion, there is no suggestion that either your would-be peers are really your inferiors or there has been some unlikely coincidence (cf. 5). Van Inwagen's challenge does not threaten the steadfast view.

# 5 The reasonable response to multi-peer disagreement

What then is the reasonable response to multi-peer disagreement? We have suggested that van Inwagen's case of serial disagreement ( $\S$ 2) is analogous to the preface case ( $\S$ 3). This implies that the reasonable response to multi-peer disagreement will be analogous to the reasonable response to the author's situation in the preface case. As we suggested above ( $\S$ 3), it seems to us that the reasonable response to the author's situation is for her to believe that her book contains some errors; this is what humility requires. Analogously, on our view, in cases of multi-peer disagreement, humility requires you to believe that in some of the relevant disagreements, your peer is right and you are wrong.

We assume here the most popular solution to the preface paradox: rejecting multipremise closure (Kyburg 1961, Foley 1979, Christensen 2004). This requires saying that it is possible for inconsistent beliefs to be individually reasonable. This solution maintains that the author can reasonably believe each of q1 ... qn and reasonably believe that at least one of q1 ... qn is false. If this is plausible, then it is equally plausible to maintain that, in cases of multi-peer disagreement, you can reasonably believe each of q1 ... qn and reasonably believe that some of S1 ... Sn are right about some of q1 ... qn.

There are independent reasons to reject multi-premise closure. The probability of a conjunction C1 & C2 is always less than the probability of the two conjuncts, C1 and C2, where the probability of each conjunct is less than 1 and greater than  $0^3$ , so repeated applications of conjunction introduction will diminish probability. Assume some degree of probability less than 1 is sufficient for reasonable belief. It will then be possible for someone to reasonably believe p1 ... pn, where the probability of each of p1 ... pn is less than 1 but greater than the degree required for reasonable belief. But for sufficiently large n, the conjunction of p1 ... pn will have a probability below the degree required for reasonable belief. It will therefore be reasonable for her to believe each of p1 ... pn but not reasonable for her to believe their conjunction.

You might object that multi-premise closure should be preserved, and conclude that (for example) the author in the preface case ought to conclude that her book is error-free. But *if* that is a plausible solution to the preface paradox, *then* so is the following thought: in cases of multi-peer disagreement, you ought to conclude that either your would-be peers are in fact your epistemic inferiors or the relevant disparity is an unlikely coincidence. So although we favor rejecting multi-premise closure, our defense of the steadfast view is compatible with this alternative solution to the preface paradox. However, our argument is based on an **anti-skeptical** approach to the preface paradox:

 $<sup>^3</sup>$  Assuming, as well, that the probability of C1 given C2 and the probability of C2 given C1 are both less than 1.

we do assume that it is not plausible to solve the preface paradox by concluding that it is not the case that the author ought to believe each of  $q1 \dots qn$ .

Intuitively, although the author in the preface case ought not believe that her book is error-free, it is reasonable for her to believe that her book is *mostly* error-free. After all, it is meticulously researched. We have suggested that van Inwagen's case of serial disagreement is analogous to the case of the author in the preface case. This seems to imply that we are committed to the view that it is reasonable, in cases of multi-peer disagreement, for you to believe that in *most* of the relevant disagreements, you are right and your peer is wrong. Suppose we are; is this commitment problematic?

It is not. Suppose that, in most of the peer disagreements to which you are a party, you are right and your peer is wrong. This suggests no unreasonable or absurd conclusion. It is compatible with this that the relevant peers really are peers – that, for example, they are equally reliable on the relevant topic (cf. §1). It is compatible with this that, for each of my peers, in most of the peer disagreements to which she is a party, she is right and her peers are wrong. Above ( $\S$ 2), the would-be disparity between you and your disagreeing peers was based on the idea that you are perfectly reliable (on the relevant topic), while each of your peers is less than perfectly reliable (on that topic), given her being on the wrong side of her disagreement with you. No such disparity is suggested once we drop the idea that you are perfectly reliable (on the relvant topic), in favor of the idea that you are generally or mostly or even highly reliable (on that topic). For it is possible for you and your peers (with whom you disagree), to be (each and every one of you) generally or mostly or highly reliable (on the topics about which you disagree). The fact that you disagree about some proposition with some (individual) peer of yours does not suggest that she isn't generally or mostly or highly reliable on the relevant topic that's just Kelly's point (§2) about (individual) peer disagreement. But this thought applies to each and every one of your peers (with whom you disagree). When it comes to each of these peers, you may reasonably conclude that she (Si) is wrong about the relevant proposition (qi). This is compatible with her being generally or mostly or highly reliable about propositions of this kind. And since you do not take yourself to be perfectly reliable about propositions of this kind, but only generally or mostly or highly reliable, there is no disparity between you and your peer.

To sum up: we argued that the problem of multi-peer disagreement does not threaten the steadfast view ( $\S$ 1), given that van Inwagen's challenge ( $\S2$ , \$4) relies on the same principle of multi-premise closure that generates the preface paradox (\$3). And we argued that, in cases of multi-peer disagreement, you ought to believe that in *some* of the relevant disagreements, your peer is right and you are wrong, but that you may reasonably believe that in *most* of the relevant disagreements, you are right and your peer is wrong.

#### **Bibliography**

Bergmann, M. (2009), "Rational Disagreement After Full Disclosure," *Episteme* 6:3, pp. 336-53.

Christensen, D. (2004), Putting Logic in Its Place: Formal Constraints on Rational Belief (Oxford University Press).

----- (2007), "Epistemology of Disagreement: The Goods News," *Philosophical Review* 116(2), pp. 187-217.

Elga, A. (2007), "Reflection and Disagreement," Noûs 41(3), pp. 478-502.

Feldman, F. (2006), "Epistemological Puzzles about Disagreement," in S. Hetherington (ed.), *Epistemology Futures* (Oxford University Press), pp. 216-36.

Foley, R. (1979), "Justified Inconsistent Beliefs," *American Philosophical Quarterly* 16:4, pp. 247-57.

Gutting, G. (1982), Religious Belief and Religious Skepticism (University of Notre Dame Press).

Kelly, T. (2005), "The Epistemic Significance of Disagreement," Oxford Studies in Epistemology 1, pp. 167-96.

----- (2010), "Peer Disagreement and Higher-Order Evidence," in R. Feldman and T.A. Warfield (eds.), *Disagreement* (Oxford University Press), pp. 111-74.

Kyburg, H. (1961), Probability and the Logic of Rational Belief (Wesleyan University Press).

Makinson, D.C. (1965), "The Paradox of the Preface", Analysis 25, pp. 205-7.

van Inwagen, P. (2010), "We're Right. They're Wrong," in R. Feldman and T.A. Warfield (eds.), *Disagreement* (Oxford University Press), pp. 10-28.

Weisberg, J. (2010), "Bootstrapping in General," *Philosophy and Phenomenological Research* 81(3), pp. 525-48.

White, R. (2005), "Epistemic Permissiveness," Philosophical Perspectives 19, pp. 445-59.