

Reasons, basing, and the normative collapse of logical pluralism

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Abstract Logical pluralism is the view that there is more than one correct logic. A key objection to logical pluralism is that it collapses into monism. The core of the Collapse Objection is that only the pluralist's strongest logic does any genuine normative work; since a logic must do genuine normative work, this means that the pluralist is really a monist, who is committed to her strongest logic being the one true logic. This paper considers a neglected question in the collapse debate: what is it for a logic to do genuine normative work? As well as having wider upshot for the connection between logic and normativity, grappling with this question provides a new response to the Collapse Objection on behalf of the pluralist. I suggest that we should allow logics to generate pro tanto reasons in a way that bears not just on combinations of attitudes but on how an agent's attitudes are based on one another. This motivates adopting normative principles that allow the pluralist's weaker logics to earn their normative keep. Rather than being ad hoc, these principles capture a sense in which good reasoning goes beyond the consistency of an agent's attitudes. Good reasoning is also concerned with how an agent's attitudes are based on one another.

Keywords Logical pluralism \cdot Collapse objection \cdot Normativity \cdot Reasoning \cdot Reasons \cdot Basing

Logical pluralism is the view that there is more than one correct logic (Beall & Restall, 2006). Recently, several authors have argued against pluralism on the

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grounds that it collapses into monism (Priest, 2006; Read, 2006; Keefe, 2014; Stei, 2020). The core of the Collapse Objection is that only the pluralist's strongest logic does genuine normative work. Since a logic must do genuine normative work, the putative pluralist is really a monist, who is committed to her strongest logic being the one true logic.² Pluralists have responded in various ways, including: embracing contextualism about attributions of validity (Caret 2016); denying that logic is normative (Russell, 2017; Blake-Turner and Russell 2018); and denying that logic is topic neutral (Kouri Kissel & Shapiro, 2017). In this paper, I do three things. First, in Sect. 1, I formulate the Collapse Objection in a way that highlights a question that has been neglected in the debate: what is it for a logic to do genuine normative work? Both proponents and opponents of the Collapse Objection implicitly assume that genuine normative work must be cashed out in terms of all-or-nothing notions, such as entitlement or obligation. Rejecting this assumption paves the way for the Collapse Objection to be resisted by allowing a logic to do genuine normative work that is nondecisive, for instance by generating pro tanto reasons. Second, in Sect. 2, I investigate more generally what it is for a logic to do genuine normative work. I give considerations independent of the Collapse Objection for broadening our normative horizons along three dimensions. First, given the importance of reasons throughout our normative lives, we should consider pro tanto normative contributions as well as all-or-nothing ones. Second, I highlight an underdiscussed kind of principle connecting logic to normativity. Basing principles concern not combinations of attitudes, but how an agent's attitudes are based on one another. This kind of normative contribution is warranted because good reasoning has to do not only with how an agent's attitudes cohere with one another, but also how her attitudes are supported by one another. Third, taking seriously the motivations of nonclassical logicians suggest that we should consider the normative upshot of logical facts about *invalidity*, as well as validity. Finally, in Sects. 3 and 4, I revisit the Collapse Objection in light of this discussion. I suggest two promising principles (couched in terms of reasons and basing) for the pluralist. I argue that adopting at least one of these principles allows the pluralist to resist collapse. A pluralist's weaker logics can earn their normative keep by making a difference to what reasons an agent has, even if they don't make a difference to what she is entitled or obligated to believe.

1 The collapse objection

Here is the *Collapse Objection* in its most general form.

(1) WORK. All logics do genuine normative work.

² The provenance of the objection is somewhat hard to pin down. Beall and Restall (2006,94, n. 7) attribute it to Gary Kemp and Stephen Read. Read (2006) credits the original version of the challenge to a manuscript of Priest's, published as (Priest, 2001). Stei (2020, 421) traces a similar objection to Williamson (1988, 112).



¹ Bueno and Shalkowski (2009) argue for the modal, rather than the normative, collapse of Beall and Restall's pluralism. While Bueno and Shalkowski raise an interesting challenge for logical pluralism, I focus here solely on the problem that stems from logic's connection to normativity.

- (2) ONLY ONE WORKS. One and only one logic does genuine normative work.
- (3) Therefore, there is one and only one logic.

According to Work, a logic must make a genuine normative difference to agents. It's agreed on all sides that there are different things we might call "consequence relations", which we can define semantically or proof-theoretically. The point of contention is whether more than one of these is a *genuine* logic, rather than a mere piece of mathematical machinery. For a logic, K, to be a genuine logic in this sense, K must do genuine normative work: the K-validity (or K-invalidity) of an argument must make a genuine normative difference to what an agent believes or does.

Work is consistent with a wide variety of positions about the source of logic's normative significance. It might be that what it *is* to be a logic is to be normative (Field, 2009a). Or it might be that a logical theory comes with bridge principles that determine normative consequences given facts about validity and invalidity (MacFarlane, 2004; Steinberger, 2019a). Finally, a logic might do genuine normative work not because the logic itself is normative, but because logical facts have normative upshot when coupled with general background epistemic principles (Russell, 2017; Blake-Turner & Russell, 2018).³

This construal of the Collapse Objection is deliberately idiosyncratic. It focuses our attention on a question: what is it for a logic to do genuine normative work? This question deserves more attention than it has been given in the collapse literature. Both friends and foes of collapse tend to assume one particular conception of genuine normative work. After articulating that conception and explaining how it leads to collapse, I will argue that we should broaden our normative horizons to consider more inclusive notions of normative work. Doing so both shifts the collapse debate to more productive territory, and makes room for a new pluralist response to the Collapse Objection.

Before getting to that, however, I'm going to make two assumptions to ease exposition. First, I assume that the pluralist endorses a set of logics, \mathcal{L} , with the following structure: one of the logics in \mathcal{L} is strictly strongest.⁴ This assumption is warranted both because leading pluralists endorse logics with that structure (Beall & Restall, 2006), and because variants of the Collapse Objection can be pressed against pluralists whose logics are differently structured (Keefe, 2014; Stei, 2020). Second, I assume that the pluralist endorses only two logics: a strictly strongest logic, and a weaker one. It is easy to generalize the Collapse Objection to more logics. For concreteness, I suppose that the pluralist's strictly strongest logic is

⁴ K_i is the strictly strongest logic in $\mathscr L$ just in case: $K_i ∈ \mathscr L$ and for any other $K_j ∈ \mathscr L$, for all sets of sentences, Γ, and sentences, α: (a) if $\Gamma \vDash_{K_j} \alpha$, then $\Gamma \vDash_{K_i} \alpha$; and (b) for some $\Delta, \beta, \Delta \vDash_{K_i} \beta$ and $\Delta \nvDash_{K_j} \beta$. Informally, the strictly strongest logic validates all, but not only, the arguments that the other logics validate. (I'll use " $\Gamma \vDash_{K_i} \alpha$ " to mean that the argument from the set of premises, Γ, to the conclusion, α, is K-valid. The double turnstile is just a piece of notation: I assume nothing here about the priority of model-theoretic construals of consequence.)



 $^{^3}$ See Stei (2019) for an argument that even views that eschew logic's normativity are vulnerable to collapse.

(propositional) classical logic, CL, and that she also endorses (propositional) relevance logic, R.⁵

To understand the Collapse Objection, we need to be more precise about what it is for a logic to do genuine normative work. Proponents and opponents of the Collapse Objection alike implicitly construe such work in all-or-nothing terms, that is in terms of entitlements or obligations. Here are a few representative quotations (original emphasis).⁶

[S]uppose... we know that [the premises of a valid argument are] true... Should we, or should we not conclude that [the conclusion] is true? (Read, 2006, 194–195)

[A]re we, or are we not, entitled to accept [the conclusion of an argument]? Either we are, or we are not: there can be no pluralism about this (Priest, 2006, 203).

[T]here is a single relation which tracks the preservation of entitlement, and you can't be a pluralist about *that* (Beall & Restall, 2006, 94).

[T]here cannot be many conflicting ways that we *should* reason (Keefe 2014, 1379).

These authors differ in various respects. But they agree on taking the crucial normative issue with respect to the Collapse Objection to be an all-or-nothing notion: an entitlement or an obligation. More precisely:

ALL-OR-NOTHING NORMATIVE WORK. A logic does genuine normative work if and only if it makes an all-or-nothing normative difference: a difference to what an agent is entitled or obligated to do.

There are many different ways of construing All-or-Nothing Normative Work, but it will be helpful to have one to focus on. Consider the following principle (Caret, 2016, 9; Stei, 2020, 426).

Oughts from Validity. For any logic, K, if $\Gamma \vDash_K \alpha$, then S ought to be such that she does not both: believe each $\gamma \in \Gamma$ and disbelieve α .

So let's suppose that a logic makes an all-or-nothing normative difference—and thereby does genuine normative work—by way of Oughts from Validity. This will ease exposition without loss of generality.⁸

⁸ It will take some work to see how this supposition does not exclude views that eschew bridge principles like Oughts from Validity (Russell, 2017; Blake-Turner & Russell, 2018). I can't do that work here, but see Stei (2019) to get a sense of how it will go.



⁵ There are many logics that go by the name "relevance" or "relevant" logic. For influential expositions see Anderson and Belnap (1976), Anderson et al. (1992). I'll use "*R*" to refer to the relevance logic endorsed by Beall and Restall (2006).

⁶ Given the context-sensitivity of deontic modals, we need to assume an implicit contextual restriction, such as "According to the rational dictates of logic."

⁷ This agreement is almost universal among those who discuss the Collapse Objection. The only exception I'm aware of is Steinberger (2019a, 2). However, while he explicitly mentions the possibility that logics generate pro tanto reasons, his argument only focuses on all-or-nothing notions.

Now that we have a handle on what it is for a logic to do genuine normative work, we can see how friends of the Collapse Objection argue for Only One Works. They claim that the pluralist's weaker logic, R, does no genuine normative work. There are two cases to consider. R can do genuine normative work either when it agrees with CL about an argument's validity, or when it disagrees with CL about an argument's validity.

The logics agree. Consider any argument that is R-valid, say: $\{P, P \to Q\} \vDash_R Q$. Since CL is the strictly strongest logic, that argument is also CL-valid: $\{P, P \to Q\} \vDash_{CL} Q$. By Oughts from Validity, both R and CL generate an obligation for an agent to be such that she doesn't both believe the premises and disbelieve the conclusion. But obligations don't stack: only one of them is normatively efficacious. Which one? Well, as we're about to see, only CL does work when the logics disagree. So, by applying a normative razor and declining to proliferate sources of normativity, we also let CL do the work when the logics agree. Hence, R does no genuine normative work.

The logics disagree. Since CL is the strictly strongest logic, disagreement must involve an argument's CL-validity and R-invalidity. Consider in particular the argument from P to $Q \lor \neg Q$, which is CL-valid but R-invalid. Suppose the pluralist believes that P. By Oughts from Validity and the CL-validity of the argument, the pluralist ought either to give up her belief that P, or not disbelieve that $Q \lor \neg Q$. So CL makes a difference to what the pluralist ought to do; it does genuine normative work. R, however, makes no normative difference whatsoever: Oughts from Validity determines that a logic, K, has normative upshot only if an argument is K-valid. But the argument is not K-valid. Hence, K does no genuine normative work.

Generalizing the preceding line of thought yields a more thorough argument for the collapse of logical pluralism:

- (1) WORK. All logics do genuine normative work.
- (1.1) All-or-Nothing Normative Work. A logic does genuine normative work if and only if it makes an all-or-nothing normative difference: a difference to what an agent is entitled or obligated to do.

This is right, but I'm going to set it aside for present purposes. There are tricky issues in thinking through whether the analogy carries over to logic. But, to the extent that it does, this only helps my case: it's another potential source of genuine normative work both to be considered in general and for pluralists to draw on when resisting the Collapse Objection.



⁹ Extant versions of the Collapse Objection focus exclusively on cases where the logics disagree. This is a mistake. Just because the logics agree doesn't mean that only one of them does genuine normative work. I'll argue for this in Sect. 3.

¹⁰ Since Oughts from Validity is silent when an argument is *K*-invalid, set aside the case where the logics agree on the invalidity of an argument. But see n. 36.

¹¹ This is a little quick. It might be normatively important that I have multiple grounds for one and the same obligation. For example, I've promised both Amari and Bakari to go to the party. If, say, Amari relieves me of my obligation, I'm still obligated to go in virtue of my promise to Bakari. And if neither relieves me, they both have a claim on my going.

(1.2) Whether the pluralist's logics agree or disagree, only the strongest logic makes an all-or-nothing normative difference.

- (2) ONLY ONE WORKS. One and only one logic does genuine normative work.
- (3) Therefore, there is one and only one logic.

Making explicit the structure of the argument highlights the important role that a particular conception of genuine normative work is playing. All-or-Nothing Normative Work is usually left implicit and so escapes scrutiny. At the very least, friends of the Collapse Objection need to make a case for it, which they have not yet done. Moreover, it's worth exploring the normative landscape independently of concerns about collapse. Does Oughts from Validity exhaust what it is for a logic to do genuine normative work? After exploring this general question in Sect. 2, I'll return to the Collapse Objection in Sect. 3. There I'll suggest two normative principles that are promising for the pluralist. Adopting either principle allows her weaker logic to do genuine normative work in a way that buttresses pluralism against collapse.

2 Broadening our normative horizons

Why think that logic has anything to do with normativity at all? A very natural and widely accepted answer is that logic is centrally bound up with reasoning, which is a normative enterprise (Priest, 2006, 191–192, 196). There are right and wrong, better and worse, ways of reasoning. A logic—a genuine logic and not just a piece of mathematics—has upshot for that.¹³

With this broad motivation in mind, let's revisit Oughts from Validity.

OUGHTS FROM VALIDITY. For any logic, K, if $\Gamma \vDash_K \alpha$, then S ought to be such that she does not both: believe each $\gamma \in \Gamma$ and disbelieve α .

There are three dimensions along which we might vary $Oughts From\ Validity$ when thinking about what it is for a logic to do genuine normative work. ¹⁴

¹⁴ These are not the *only* dimensions along which we might further explore the normative upshot of logic. Others include: logic has normative upshot only when a claim about consequence is known or believed by an agent (MacFarlane, 2004), or when a claim about consequence is obvious (Field, 2009b); logic's normative upshot is not for patterns of beliefs and disbeliefs but for credences (Field, 2009b) or perhaps includes other doxastic attitudes like suspension; and so on.



¹² In Sect. 4, I consider a case for All-or-Nothing Normative Work on behalf of the friend of collapse.

¹³ There are important differences with respect to how this might work, for instance by guiding agents in deliberation, or by serving as standards of correctness for reasoning (Steinberger, 2019b). But we can set them aside here.

It's worth stressing that, as mentioned in Sect. 1, I am neutral about *how* logic has normative upshot in general, and for reasoning in particular. Hence, the present discussion is compatible with the claim that a logic only has upshot for reasoning when combined with background normative principles (Russell, 2017; Blake-Turner & Russell, 2018). There are those who deny that logic has any bearing on reasoning at all. Harman (1986) is usually interpreted this way, though I suspect that Harman's position is better put as: logic has no *special* upshot for reasoning. What that means, and whether it is a good reading of Harman, are matters for another occasion. For now, let's develop the debate as one among the many who think that, in some way or other, logic has an important connection to the normative enterprise of reasoning.

First, we might vary the normative notion. Second, we might vary the object of that normative notion. Third, we might vary which logical facts are taken into account. Let's consider each possibility in turn.

2.1 Reasons-related principles

There is more to normative life than all-or-nothing notions. In addition to entitlements and obligations, the normative landscape is comprised of pro tanto reasons that can be weighed and balanced. Although I ought not eat a second piece of cake, I have a reason to do so: it's delicious. If we focus just on what I ought to do, we exclude an important part of the normative landscape. It matters, normatively speaking, that I have a reason to eat the second piece of cake. Among other things, it makes it appropriate for me to have attitudes that it might otherwise be inappropriate to have (Dancy, 2004, 4–6). For instance, I might appropriately feel a tinge of regret at not having had less to eat earlier, even as I dutifully refrain from eating the second piece of cake. If the cake were not delicious and I lacked any reason to eat the second piece, my regretful attitude would not be appropriate in this way.

Thus one way of changing Oughts FROM Validity is to deploy a pro tanto notion (reason) rather than an all-or-nothing one (ought). For instance:

REASONS FROM VALIDITY. For any logic, K, if $\Gamma \vDash_K \alpha$, then S has a reason to be such that she does not both: believe each $\gamma \in \Gamma$ and disbelieve α .

When thinking about what it is for a logic to do genuine normative work, two considerations count in favor of reasons-related principles like Reasons from Validity. The first consideration is broad. As mentioned, reasons play an important role in our normative lives in general and so we need an argument for banning reasons from the part of our normative lives to which logic is relevant. ¹⁶

The second consideration is specific to logic. Consider the preface paradox (Makinson, 1965; Ryan, 1991). Let Δ be the set of claims in the body of your book, and let β be their conjunction. By Oughts from Validity and the fact that $\Delta \vDash \beta$, you ought either to stop believing at least one $\delta \in \Delta$, or not disbelieve β . When you check the claims in your book, each one seems true and your belief in it is confirmed. But you also believe that you are fallible and that you, like the authors that have gone before you, have made a false claim somewhere in your book. That is, you believe $\neg \beta$. Assuming that believing $\neg \beta$ is tantamount to disbelieving β , you violate Oughts from Validity: you believe each $\delta \in \Delta$ and yet disbelieve β . The second second validation of the preface paradox (Makinson, 1991).

¹⁸ The assumption is not uncontroversial, but we needn't get bogged down in that here. See Priest (2006, 103–115) for discussion.



 $^{^{15}}$ I do not mean to suggest that this exhausts the normative landscape. Nor do I take a stand on the prospects of reducing the all-or-nothing notions to reasons, or vice versa. Furthermore, I will assume that "ought" is not pro tanto: it always picks out an all-or-nothing obligation.

¹⁶ In Sect. 4, I consider an objection: logics do generate reasons, but that is not *genuine* normative work—the kind of normative difference that a logic must make to count as a genuine logic.

¹⁷ Even very weak logics like *FDE* validate conjunction introduction (Omori and Wansing, 2017).

There are many ways one might diagnose the problem with the preface paradox (Kaplan, 1996, 112–121; Christensen, 2004, 33–68). But a very natural thought is that Oughts from Validity is the culprit. One need not abandon the principle altogether, but merely exclude preface cases from its scope. Grant this for the sake of argument. Oughts from Validity misfires in preface cases and fails to generate an obligation. Hence, you can be perfectly within your rational rights to believe each of the claims in your book while disbelieving their conjunction. Still, there is *some* normative pressure not to disbelieve the conjunction; if there were no normative pressure against disbelieving the conjunction at all, it's hard to see how the paradox could be compelling.

This normative residue is well explained by logic's providing reasons (MacFarlane, 2004). The fact that β is a consequence of Δ provides a reason not to disbelieve β . Even if this reason is outweighed by strong countervailing considerations—your fallibility, a large body of inductive evidence, and so on—the reason generated by logic explains the normative pressure not to disbelieve the conjunction of the claims of your book; it also licenses the unease you feel in so disbelieving.

2.2 Basing principles

Recall:

Oughts from Validity. For any logic, K, if $\Gamma \vDash_K \alpha$, then S ought to be such that she does not both: believe each $\gamma \in \Gamma$ and disbelieve α .

Let's hold fixed, for the time being, the normative notion as an "ought." We might nonetheless explore another dimension of genuine normative work by varying the object of the normative notion. Let me explain.

OUGHTS FROM VALIDITY'S normative notion applies to being in a certain kind of state: believing each of the premises of a valid argument while at the same time disbelieving the conclusion. OUGHTS FROM VALIDITY is thus a *combinatorial* principle. It precludes the agent from having a certain combination of attitudes. I

²⁰ Assume that, in the preface case, the following way of satisfying the wide-scope Reasons from Validity is rationally unavailable: giving up a belief in at least one δ . For discussion on wide-scope normative principles, see Greenspan (1975), Broome (1999), Schroeder (2004), Lord (2014).



¹⁹ Beall and Restall (2006, 16–17) themselves instead suggest that the preface paradox involves an epistemic dilemma. To the extent that this handling of preface cases is adequate, it undermines the argument for logic's generating reasons that I am about to make. There are two issues with Beall and Restall's solution to the preface paradox, however. First, it is a general desideratum of our normative theories that they avoid positing dilemmas. This is not a fixed point, but we should avoid positing dilemmas in the absence of alternative solutions (of which there are many for the preface paradox). Second, Beall and Restall (2006, 17) write as though logic's normative upshot in preface cases is overridden by the considerations against believing β: "[t]he normativity of logical consequence remains, even if in this circumstance it is trumped by other norms." This certainly chimes with most intuitive verdicts, but it is hard to see how, if logic's normativity is "trumped" in preface cases, they are instances of genuine dilemmas. The trumping talk is better accounted for by saying that there is strong normative pressure (from logic) to believe β, but this pressure is outweighed by the inductive and other pressure against believing β. But that is precisely to couch logic's normative upshot in pro tanto terms, as I am about to recommend.

suggest that, in broadening our normative horizons, we should also consider *basing* principles. For example:

OUGHTS (BASING) FROM VALIDITY. For any logic, K, if $\Gamma \vDash_K \alpha$, then S ought to be such that: if she believes each $\gamma \in \Gamma$, then she bases a belief in α on her beliefs in each $\gamma \in \Gamma$.

This principle says, roughly, that an agent ought not believe each of the premises of a valid argument without at the same time basing a belief in the conclusion on those premise-beliefs. Thus, rather than applying to a combination of attitudes, the principle applies to how an agent's attitudes are based on one another.

As it stands, Oughts (Basing) from Validity is not very plausible. Suppose some of my beliefs, $\{P_1...P_n\}$, entail a conclusion, Q. It seems that I needn't go wrong in failing to base a belief in Q on my beliefs in $P_1...P_n$.²² Perhaps the conclusion is extremely complicated and it doesn't make sense to think that I ought to believe it at all. Or perhaps I already believe the conclusion on other conclusive grounds, $\{P_{n+1}...P_{n+m}\}$.

Although the specific principle is suspect, the move to basing principles in general is well motivated. One thing involved in reasoning is ensuring that our attitudes hang together in a coherent way. Oughts from Validity—the principle we started with and that is assumed in the collapse debate—certainly speaks to this, as it prohibits inconsistent combinations of attitudes. But reasoning involves more than this. It also involves considering how our attitudes are based on one another. When I reason well, I don't just end up at an attitude that is consistent with my other attitudes; I end up with an attitude that is supported by my other attitudes.

²² In order to ease exposition I will occasionally, as here, be sloppy about the normative upshot of wide-scope principles. Strictly, Oughts (Basing) from Validity has me go wrong *either* in failing to base a belief in Q on my beliefs in $P_1 \dots P_n$ or in not giving up one of my beliefs in $P_1 \dots P_n$. All the principles I consider here, including those in Sect. 3 that I suggest the pluralist should adopt, are officially wide scope in formulation. Hence, there will be multiple ways of abiding by them, even if I do not always flag that in the main text.



²¹ Unlike the other principles, I've construed the claim within the scope of the normative notion as a conditional. I intend this to be a material conditional, such that Oughts (Basing) from Validity is equivalent to: "For any logic, K, if $\Gamma \models_K \alpha$, then S ought to be such that she does not both: believe each $\gamma \in \Gamma$ and fail to base a belief in α on her beliefs in each $\gamma \in \Gamma$." The formulation in the main text has the advantage of avoiding the awkward-to-parse "does not... fail to base a belief." Similar remarks will reply to the formulation of Reasons (Basing) from Validity in Sect. 3.

Non-basing principles admit variation with respect to their polarity (MacFarlane, 2004; Field, 2009b) That is, positive non-basing principles have the agent believing α , whereas negative non-basing principles have the agent *not dis*believing α . These are importantly different because I am able not to disbelieve α by suspending judgment about α , but I cannot thereby believe α . Basing principles admit of a similar distinction. Oughts (Basing) from Validity is a positive principle: it concerns basing a belief in α . We could formulate a negative version of the principle as follows: for any logic, K, if $\Gamma \models_K \alpha$, then S ought to be such that she does not both: believe each $\gamma \in \Gamma$, and base a disbelief in α on her beliefs in each $\gamma \in \Gamma$. While this principle would avoid the issues with Oughts (Basing) from Validity I'm about to raise, it won't ultimately help the pluralist. All the normative work would still be done by the strongest logic. Nonetheless, further discussion of polarity, and other dimensions of normative variation, is warranted in a more systematic investigation of basing principles than I can give here.

Reasoning correctly can ensure our attitudes are properly based (Boghossian, 2014; McHugh & Way, 2018; Neta, 2019).²³

Oughts from Validity does not speak to this aspect of reasoning at all. Suppose I believe that P and believe that $P \to Q$. Suppose also that my evidence for them is so overwhelming that I ought not give either of them up. Then, given both the CL- and R-validity of modus ponens, to satisfy Oughts from Validity I ought not disbelieve that Q. In fact I come to believe that Q and so am as I ought to be: believing that Q can be a way of not disbelieving that Q. But notice that Oughts from Validity is completely silent about how satisfy it. I satisfy Oughts from Validity just as well whether I conclude that Q by an application of modus ponens, or whether I come to believe it as a result of a bump on the head.

I don't mean this to be a decisive case against Oughts from Validity. But the principle leaves out an important aspect of reasoning: basing our attitudes on one another. So, to the extent that a logic ought to speak to reasoning, we should take seriously the possibility that the logic has normative upshot not just for how an agent's attitudes hang together in the combinatorial sense, but for how they are based on one another. In Sect. 3, I'll suggest more promising basing principles than Oughts (Basing) from Validity. The point to underscore here is that basing principles are a well motivated way of broadening our conception of what it is for a logic to do genuine normative work.

One might object, however, that even if basing is an important aspect of reasoning, it's not the work of a deductive logic to provide a full theory of reasoning. Perhaps basing is the purview of a theory of justification or an inductive logic. Let me say two things by way of reply. First, considering basing principles is compatible with demarcating deductive logics from inductive logics on the grounds of necessitation. And we might think that there's an important aspect of reasoning concerned with basing for necessarily truth-preserving inferences. Second, taking seriously the motivation of nonclassical logicians suggests that it is precisely this aspect of reasoning that many of them are keen to capture with their consequence

²⁵ See Bueno and Shalkowski (2009) for a discussion of necessitation in the context of Beall and Restall's Pluralism (Beall & Restall, 2006).



²³ Two clarifications. First, reasoning correctly does not *guarantee* that our attitudes are well grounded or properly based. But nor does reasoning correctly guarantee that our attitudes are correct: we might have started from falsehoods. There are complications about what exactly it is for an attitude to be properly based—that is, correctly based on normative reasons. We can set them aside, but see Turri (2010); Lord and Sylvan (2019).

Second, and relatedly, we should distinguish *structural* and *substantive* basing principles. The former concern only how attitudes are based on other attitudes, while the latter concern how attitudes are based on normative reasons—presumably evidence in the case of beliefs. Our focus here is on structural basing principles. This is because it is not the business of (deductive) logic to weigh in on what makes for good evidence. Rather, logic's normative upshot concerns how one's attitudes relate to one another, both in the traditional combinatorial sense and in the basing sense that I am highlighting. For more on structural and substantive principles in contexts other than logic, see Scanlon (2007), Worsnip (2015), Fogal (2019).

²⁴ This is compatible with the point made in n. 21, that believing α is not *equivalent* to not disbelieving α . Believing that α is one way of not disbelieving α , but there are others, including: suspending judgment about α , never having considered α .

relations. To see this, let us consider one final neglected dimension of the normative landscape before revisiting the Collapse Objection.

2.3 Invalidity

Relevance logicians are often explicitly motivated to formulate a consequence relation that captures a sense in which an argument's goodness goes beyond mere truth preservation. In addition, they claim, an argument's goodness stems in part from the premises' *supporting* the conclusion. As Beall and Restall (2006, 55, original emphasis) put it, "the conclusion of a relevantly invalid argument does not follow *from* the premises." While the argument from P to $Q \lor \neg Q$ preserves truth, it is deficient in so far as P provides no support for $Q \lor \neg Q$. This is reflected in the R-invalidity of the argument. This is important for two reasons. First, it provides additional support for bringing basing principles into the discussion of logic's normative upshot. An important motivation for relevance logicians is that an arbitrary premise cannot be a good basis for an arbitrary conclusion, even a logical truth: the premise is irrelevant to the conclusion.

Second, and independently of basing, the Beall-and-Restall intuition supports considering what normative upshot a logic might have due to an argument's *invalidity*. After all, the intuition is that there is something problematic about the argument from P to $Q \lor \neg Q$ —something that is reflected by its R-invalidity.

Here's a candidate principle that makes a connection between the invalidity of an argument and normativity:

Oughts from Invalidity. For any logic, K, if $\Gamma \nvDash_K \alpha$, then S ought to be such that she does not both: believe each $\gamma \in \Gamma$ and believe α .

As it stands, this principle is not plausible. To take just one major problem, Oughts from Invalidity precludes an agent from having any beliefs that are not logically entailed by her other beliefs. Banned beliefs include those which are not entailed by one's other beliefs, but for which one has extremely strong non-deductive evidence.

Once again, however, the present concern is not the specific principle, but the broader construal of what it might be for a logic to do genuine normative work. Relevance logicians are motivated by the defectiveness of the argument from P to $Q \vee \neg Q$. This opens the door to countenancing logic's making a normative difference from invalidity, as well as validity.

When thinking generally about what it is for a logic to do genuine normative work, I've suggested that we need to broaden our normative horizons. We should look beyond a principle like to Oughts from Validity to consider three neglected dimensions of normative work: reasons-related principles that allow for pro tanto

 $^{^{26}}$ The generalization of this part of the argument to logics other than R is not trivial. Analogous arguments will have to be made on a logic-by-logic basis. I am cautiously optimistic about these prospects. Consider how the reasoning might run for intuitionistic logic: intuitionistically invalid arguments are deficient insofar as there is no demonstration of the conclusion from the premises. The unavailability of a proof is what, according to the intuitionist, undermines the premises' ability to be a good basis for the conclusion. The point deserves further consideration, but that will have to be left to another occasion.



normative work; basing principles that involve normative objects other than combinations of attitudes; and invalidity principles that allow for normative work when an argument is invalid.²⁷

There is more to be said at this general level of normative exploration. But it is time for us to return to the Collapse Objection.

3 The collapse objection revisited

From this more inclusive perspective of what it might be for a logic to do genuine normative work, consider two principles. They are promising candidates for the pluralist to appeal to in securing genuine normative work for her weaker logic.

REASONS (BASING) FROM VALIDITY. For any logic, K, if $\Gamma \vDash_K \alpha$, then S has a reason to be such that: if S believes each $\gamma \in \Gamma$, then S bases a belief in α on her beliefs in each $\gamma \in \Gamma$.

REASONS (BASING) FROM INVALIDITY. For any logic, K, if $\Gamma \nvDash_K \alpha$, then S has a reason against being such that she both: believes each $\gamma \in \Gamma$ and bases a belief in α on her beliefs in each $\gamma \in \Gamma$.

These principles differ from Oughts from Validity by changing both the normative notion to a pro tanto one, and the object of the normative notion to something that involves basing. Reasons (Basing) from Invalidity also changes the condition for normative upshot to the invalidity of an argument.

The principles have the same general motivations as considered in the last section. Reasons are important in other normative disciplines (say, ethics and epistemology), and we should also consider them in philosophy of logic. The move to reasons is also motivated by particular cases, like the preface paradox. Bringing in basing is warranted by the background assumption that a genuine logic has an important connection to reasoning and the fact that reasoning involves how attitudes are based on one another, and not just whether they are consistent. Finally, both the move to basing principles and the move to an invalidity principle gain support from taking seriously a key motivation of relevance logicians: the defectiveness of *CL*-valid but *R*-invalid arguments. This is naturally interpreted as a failure of the premises to provide an adequate basis for the conclusions of *R*-invalid arguments.²⁸

Before seeing how these principles can help the pluralist avoid collapse, four clarifications are in order.

²⁸ The interpretation of *R*-invalid arguments as not providing adequate bases also gains support from the difficulties of specifying a notion of relevance that can do the duty that relevance logicians require of it. See, for instance, Lewis's (1988) criticism of "relevant implication."



²⁷ To be clear, reasons-related principles have been discussed [by, for instance, Harman (1986, 11–20), MacFarlane (2004)], but they have not been taken up in the collapse debate. As far as I am aware, neither basing principles nor invalidity principles have been seriously considered either in the context of collapse, or in the wider debate about logic and normativity. See Way (2011) for discussion of basing principles in an ever broader context, however.

First, the normative object of these principles involves basing a belief in the conclusion of an argument on its premises. Theorists often focus on inference that results in forming a new belief. While this is one way of basing a belief in the conclusion on the premises, inference need not result in a new belief (Harman, 1986, 11–12). It can also involve basing a belief one already has on a new foundation, as when I perform a piece of reasoning that supports a belief I already held on different grounds. So, whether forming a new belief or basing an already held belief in a different way, Reasons (Basing) from Validity and Reasons (Basing) from Invalidity concern not just whether an agent's attitudes are consistent, but how they are based on one another.

Second, one might worry that Reasons (Basing) from Invalidity provides reasons against performing extremely strong pieces of nondeductive reasoning. Consider inferring that the sun will rise tomorrow on the basis of your beliefs about the past. The corresponding formalized argument is both *CL*- and *R*-invalid. So, granting that both logics are correct, they generate reasons against basing believing the conclusion on the premises. This is an acceptable result of Reasons (Basing) from Invalidity. The weight of the reasons against basing believing the conclusion on the premises is presumably outweighed by the inductive evidence that the premises provide for the conclusion. Moreover, the argument's *CL*- and *R*-invalidity do indeed tell against basing believing the conclusion on the premises. Despite its inductive strength, the inference is pro tanto deficient insofar as it is not deductively valid by the lights of either logic.³⁰

Third, one might worry that both principles generate more reasons for pluralists than for monists. If an argument is valid or invalid according to both the logics that a pluralist endorses, does this mean that she has an extra reason with respect to basing, a reason that the monist lacks? No. The principles are not sensitive to which logics *S* endorses, if any. Which logics generate reasons is determined by which logics are correct, not whether *S* is a monist or a pluralist.

Fourth and finally, one might worry that REASONS (BASING) FROM VALIDITY generates reasons where there should be none. Consider that $\{\alpha\} \models_{CL,R} \alpha$. But surely S does not thereby have a reason either to base a belief in α on itself or to give up her

³⁰ A similar worry arises when the pluralist's logics disagree: $\{P\} \vDash_{CL} Q \lor \neg Q$ but $\{P\} \nvDash_{R} Q \lor \neg Q$. Reasons (Basing) from Invalidity provides a reason against performing this piece of classically valid reasoning. Two replies. First, this is feature rather than a bug, given the Beall-and-Restall intuition: "the conclusion of a relevantly invalid argument does not *from* the premises" (Beall & Restall, 2006, 55). There really is something defective with that piece of reasoning: the premise is not an adequate basis for the conclusion. Second, R and Reasons (Basing) from Invalidity provide no reason against performing the distinct inference: P; the argument from P to $Q \lor \neg Q$ is valid according to a genuine logic; therefore, $Q \lor \neg Q$. Suppose we formalize that as an argument from P and $P \to (Q \lor \neg Q)$ to $Q \lor \neg Q$. That is an R-valid instance of modus ponens.



²⁹ Harman (1986, 11–20) focuses on cases of giving up a belief in the following way: the agent takes a conclusion that is entailed by some premises to be absurd, and hence gives up a belief in at least one premise. But another kind of case of giving up a belief through reasoning is as follows: the agent performs some reasoning and that convinces her that one of her currently held beliefs is not adequately based on her other attitudes; thus she gives up the groundless belief.

belief in α . A belief cannot be an adequate basis for itself.³¹ This is a blow to Reasons (Basing) from Validity, but it can be mitigated. A deductive logic, we have already seen, is not in the business of providing a full theory of reasoning or of inferential basing. Relevance logicians try to capture a central aspect of deduction, one to which classical logic is not sensitive. But R is a regimentation and an idealization. It will not get everything correct. As long as it captures enough of a central enough aspect of reasoning, this is worth putting up with.³² I will leave the reader to judge the effectiveness of this reply. For now, let us acknowledge the potential cost and set it aside to return to the Collapse Objection.

There are choice points for pluralists here: do they accept both Reasons (Basing) from Validity and Reasons (Basing) from Invalidity or just one of them? Do they abandon Oughts from Validity or keep it alongside at least one of these new principles? Because it is most favorable to the friend of collapse, I assume that the pluralist keeps Oughts from Validity. Even so, adopting either Reasons (Basing) from Validity or Reasons (Basing) from Invalidity provides a way of resisting collapse.

Recall the subargument that the friend of collapse adduces in favor of ONLY ONE WORKS.

- (1.1) All-or-Nothing Normative Work. A logic does genuine normative work if and only if it makes an all-or-nothing normative difference: a difference to what an agent is entitled or obligated to do.
- (1.2) Whether the pluralist's logics agree or disagree, only the strongest logic makes an all-or-nothing normative difference.
- (2) Therefore, ONLY ONE WORKS. One and only one logic does genuine normative work.

The pluralist concedes (1.2), but can contend that All-or-Nothing Normative Work is too narrow. It excludes the normative labor done by reasons, via principles such as Reasons (Basing) from Validity and Reasons (Basing) from Invalidity. Moreover, when the premises are reformulated to accommodate this broader swath of normative space, the subargument is no good.

³³ Another possibility is to adopt different principles for different logics, rather than having each principle range over all the genuine logics. For instance, one might adopt something like Oughts from CL-Validity: if $\Gamma \vDash_{CL} \alpha$, then S ought to be such that she does not both: believe each $\gamma \in \Gamma$ and disbelieve α . And Reasons (Basing) from R-Invalidity: if $\Gamma \nvDash_R \alpha$, then S has a reason against being such that she both: believes each $\gamma \in \Gamma$ and bases a belief in α on her beliefs in each $\gamma \in \Gamma$.



³¹ Perhaps there are exceptions, such as the belief that one has at least one belief. But these will be rare at best.

³² Compare: $\exists xx = x$ is a logical truth according to classical first-order logic. Many take this to be an unfortunate artifact of the idealization that a logic must involve, rather than a fatal blow to the logic, or a surprising discovery of a logical truth (but see Williamson 2017).

- (1.1*) Ecumenical Normative Work. A logic does genuine normative work if and only if it makes an ecumenical normative difference: a difference to what an agent is entitled to do, obligated to do, or has reason to do.
- (1.2*) Whether the pluralist's logics agree or disagree, only the strongest logic makes an ecumenical normative difference.
- (2) Therefore, ONLY ONE WORKS. One and only one logic does genuine normative work.

The pluralist accepts this construal of genuine normative work, but contends that (1.2*) is false. To see this, let's revisit the cases of logical agreement and disagreement.

The logics agree. Consider an analogy. I promise to go to your party. I am, other things equal, thereby obligated to go to your party. If it turns out that Beyoncé is going to be at your party, that gives me a reason to go to your party that I didn't have. But my promising still suffices on its own to obligate me to go to the party; if Beyoncé cancels, I'm not thereby off the hook for fulfilling my promise. So even though Beyoncé's presence doesn't change the entitlements and obligations I am under with respect to party going, it still makes an important difference to the normative situation.

As for Beyoncé, so for the pluralist's weaker logic. 34 If $\Gamma \vDash_R \alpha$, then $\Gamma \vDash_{CL} \alpha$. So the pluralist is obligated not to believe each of the premises while disbelieving the conclusion. Grant also that this obligation is due entirely to CL. Nonetheless, the R-validity of the argument and Reasons (Basing) from Validity generate a reason to believe the conclusion on the basis of the premise-beliefs (or to give up at at least one premise-belief). It's true that the CL-validity of the argument and Reasons (Basing) from Validity generate a similar reason, but this does not make R's contribution superfluous. A reason to ϕ is not rendered inert by an additional reason to ϕ . So, when the pluralist's logics agree, even the weaker logic makes a normative difference by contributing a reason that would not be contributed were that logic incorrect. So

This is already enough to undermine (1.2*). Recall:

(1.2*) Whether the pluralist's logics agree or disagree, only the strongest logic makes an ecumenical normative difference.

So Reasons (Basing) from Validity is enough on its own to resist collapse when the logics agree. Let's set it to one side for the time being, and consider how Reasons

³⁶ Given Reasons (Basing) from Invalidity, this also holds when the logics agree on an argument's invalidity.



³⁴ There's a point of disanalogy worth mentioning. In the case of the party, the obligation and the reason have the same object: going to the party. When the pluralist's logics agree, the obligation and the reason have different objects, since the reason concerns basing rather than combinations of attitudes. Similar remarks will apply when the logics disagree. These wrinkles can be set aside, because doing so makes no difference when the logics agree, and favors the friend of collapse when the logics disagree. See n. 37.

³⁵ Perhaps there are cases where this fails to hold (Dancy, 2004). But the case under discussion does not seem to be one of them.

(Basing) from Invalidity allows the pluralist to resist collapse when the logics disagree.

The logics disagree. Consider another analogy. I promise to go to your party. I am, other things equal, thereby obligated to go to your party. I win a ticket to a Beyoncé concert that is at the same time as your party. That is a reason against going to your party, but, we can stipulate, not sufficient reason to overturn the obligation to attend. Nonetheless, the reason makes a normative difference. For instance, it licenses regret about not being able to attend the concert when I dutifully attend your party.

Now, consider again: $\{P\} \models_{CL} Q \lor \neg Q$ but $\{P\} \not\models_{R} Q \lor \neg Q$. By Oughts from

VALIDITY and the CL-validity of the argument, the pluralist ought to be such that she does not both believe that P and disbelieve that $Q \vee \neg Q$. But Reasons (Basing) from Invalidity and the R-invalidity of the argument gives the pluralist a reason against both believing that P and basing a belief that $Q \vee \neg Q$ on her belief that P. The reason doesn't undermine the obligation, nor does it mean that she has to fulfill the obligation by giving up her belief that P. Nonetheless, the reason makes a normative difference. For instance, it licenses criticism for drawing the conclusion on the basis of the premise. This is exactly the kind of criticism that a relevance logician might raise. The irrelevance of the premises to the conclusion of a truth-preserving, but R-invalid, argument provides a reason not to base a belief in the conclusion on the premises.

Let's take stock. Reasons (Basing) from Validity allows the pluralist's weaker logic to make a normative difference when the logics agree. Reasons (Basing) from Invalidity allows the weaker logic to make a normative difference when the logics disagree. Against the backdrop of Ecumenical Normative Work, if either principle is correct, then the Collapse Objection is undermined. Although they may need refining, the principles are not ad hoc. They are instead independently motivated by the general importance of reasons to normativity, by reasoning's involving basing, and by specific considerations that support the adoption of the pluralist's weaker logic.

³⁸ This is another route to the weaker logic making an all-or-nothing normative difference: the weaker logic's reason might tip the balance of reasons such that the agent *ought* to be criticized.



³⁷ There is the possibility of Reasons (Basing) from Invalidity making a difference to what the pluralist ought to do, even holding fixed CL's contribution that she ought not both believe that P and disbelieve that $Q \vee \neg Q$. Since Reasons (Basing) from Invalidity's normative object involves basing, it might tip the scales such that, in addition to not having the banned combination of attitudes, the pluralist ought not, say, base a belief in $Q \vee \neg Q$ on her belief that P. Or perhaps the pluralist ought to be criticized for basing her belief in the way that she does. These would be ways for R to do genuine normative work even by the strict standards of All-or-Nothing Normative Work: a reasons-related principle can change what an agent ought to do if the weight of the reason is strong, or if the countervailing reasons are weak. In the main text, I argue that, even if the reasons-related principles never make an all-or-nothing difference, this is still enough for the pluralist's weaker logic to earn its normative keep.

4 An objection and a reply

The discussion has revealed that the Collapse Objection's efficacy depends on what it is for a logic to do genuine normative work. Proponents (and opponents) of the Collapse Objection have construed genuine normative work as requiring an all-ornothing normative difference:

ALL-OR-NOTHING NORMATIVE WORK. A logic does genuine normative work if and only if it makes an all-or-nothing normative difference: a difference to what an agent is entitled or obligated to do.

I've argued that we should instead cast the net of normative significance wider, and include the contribution a logic might make by way of pro tanto reasons:

ECUMENICAL NORMATIVE WORK. A logic does genuine normative work if and only if it makes an ecumenical normative difference: a difference to what an agent is entitled to do, obligated to do, or has reason to do.

As we've seen, Ecumenical Normative Work combines with independently motivated principles to allow the pluralist's weaker logic to earn its normative keep.

The increase in dialectical clarity suggests a natural objection to my argument, however. The objection pushes back on replacing All-or-Nothing Normative Work with Ecumenical Normative Work. If the only way for a logic to make a genuine normative difference is by way of all-or-nothing entitlements or obligations, the Collapse Objection is reinstated. The objector can even grant Reasons (Basing) from Validity and Reasons (Basing) from Invalidity (or other reasons-related principles). That is, they can admit that logics generate reasons while insisting that this is not *genuine* normative work. Making only a pro tanto normative difference is not enough to distinguish a genuine logic from a piece of mathematics.

If this is what friends of collapse have in mind, then they need to be clear that this is what they are doing. They need to make the case that a pro tanto normative difference does not suffice for genuine normative work. In the absence of such a case, given the general importance of pro tanto reasons to other parts of the normative landscape, the pluralist is warranted in sticking to Ecumenical Normative Work. So there is a dialectical burden that needs to be discharged to make good on the objection to Ecumenical Normative Work.

One might think that this burden can be met by drawing on the extant collapse literature. Read (2006, 195) motivates the Collapse Objection by appealing to the idea that "the central question of logic" is whether the conclusion of a given argument is true (given that the premises are true). ³⁹ Take a case where CL and R disagree: $\Gamma \vDash_{CL} \alpha$ but $\Gamma \nvDash_R \alpha$. CL answers the central question. It tells us that that α is

true, given Γ . R is silent; it does not answer the central question. Given this, we should defer to CL, which normatively "trumps" R (Read, 2006, 195). And, we might extend Read's argument, CL's normative dominance with respect to R persists



³⁹ Read attributes the question to Priest (2001). See also Keefe (2014, 1385).

through any pro tanto contribution of R's. This is because those contributions are irrelevant to the central question.

While this line of thought is suggestive, there's a problem with the appeal to the central question of logic. It is far from clear either that logic has a single central question, or if so, that the question is whether the conclusion of a given argument is true (given that the premises are true). For instance, Priest (2006, 196), a friend of the Collapse Objection, argues that logic is centrally bound up with the analysis of reasoning. He adds:

[t]he central purpose of an analysis of reasoning is to determine what follows from what—what premises support what conclusions—and why.

But the question of what premises support what conclusions is not the same as the question of what conclusions are true given what premises. This is because the notion of support must be richer than mere truth preservation. As I argued in Sect. 2, good reasoning should allow premises to support a conclusion in the sense of being proper bases for it, rather than just having the premises guarantee the truth of the conclusion. This is just the kind of consideration that relevance logicians seek to capture with consequence relations like *R*. It motivates the clear and intuitive complaint against an argument from an arbitrary set of sentences to an arbitrary *CL*-logical-truth. The premises do *not* support the conclusion: the premises are not relevant to the conclusion, and so cannot be an adequate basis for it.

Hence no argument for All-or-Nothing Normative Work falls out from an appeal to the putative central question of logic. Even if logic has one such question, it's more plausibly bound up with reasoning than with what is true given some premises. Reasoning goes beyond mere truth preservation and so opens the door for the principles that I've outlined here.⁴⁰

This reply is not decisive. It leaves open the possibility of the friend of collapse making a stronger case for All-or-Nothing Normative Work. Even if such a case is forthcoming, however, we have made progress by refocusing the collapse debate on the crucial, but neglected, question of what it takes for a logic to do genuine normative work. Moreover, answers to that question will have to go beyond Oughts from Validity and consider a richer range of possibilities for normative labor.

5 Conclusion

The Collapse Objection charges the logical pluralist with being an unwitting monist. All logics do genuine normative work, but only the pluralist's strictly strongest logic does genuine normative work. So pluralism collapses into monism. Both proponents and opponents of collapse have assumed an overly narrow conception of what it is for a logic to do genuine normative work. Independently of the Collapse Objection,

⁴⁰ Admittedly, the door is most directly opened to basing principles, whether those are couched in terms of reasons or not. The main point, however, is that the appeal to a central question of logic doesn't by itself discharge the burden of explaining why pro tanto differences cannot count as genuine normative work, given the general importance of reasons throughout the normative landscape.



we should broaden our normative horizons by considering three neglected dimensions of normative work: reasons-related principles, basing principles, and invalidity principles. These dimensions are supported by: the general importance of reasons to normativity, the fact that reasoning involves basing and not just consistency, and the intuitive defectiveness with *R*-invalid arguments that motivates relevance logicians. Against the backdrop of this more ecumenical normative landscape, I highlighted two promising principles for the pluralist. If either Reasons (Basing) from Validity or Reasons (Basing) from Invalidity is correct, then the pluralist's weaker logics can earn their keep by doing genuine, albeit pro tanto, normative work. Rather than damp normative squibs, these logics contribute reasons that make an important normative difference.

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References

Anderson, A. R., & Belnap, N. D., Jr. (1976). *Entailment: The logic of relevance and necessity* (Vol. I). Princeton University Press.

Anderson, A. R., Belnap, N. D., Jr., & Michael Dunn, J. (1992). Entailment: The logic of relevance and necessity (Vol. II). Princeton University Press.

Beall, J. C., & Restall, G. (2006). *Logical pluralism*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199288403.001.0001.

Blake-Turner, C., & Russell, G. (2018). Logical pluralism without the normativity. Synthese. https://doi.org/10.1007/s11229-018-01939-3.

Boghossian, P. (2014). What is inference? *Philosophical Studies, 169*(1), 1–18. https://doi.org/10.1007/s11098-012-9903-x.

Broome, J. (1999). Normative requirements. *Ratio*, 12(4), 398–419. https://doi.org/10.1111/1467-9329. 00101.

Bueno, O., & Shalkowski, S. A. (2009). Modalism and logical pluralism. *Mind*, 118(470), 295–321. https://doi.org/10.1093/mind/fzp033.

Caret, C. R. (2016). The collapse of logical pluralism has been greatly exaggerated. *Erkenntnis*. https://doi.org/10.1007/s10670-016-9841-7.

Christensen, D. (2004). Putting logic in its place: Formal constraints on rational belief. Oxford University Press. ISBN 9780199263257.

Dancy, J. (2004). Ethics without principles. Clarendon Press.

Field, H. (2009a). Pluralism in logic. *The Review of Symbolic Logic*, 2(2), 342–359. https://doi.org/10.1017/s1755020309090182.

Field, H. (2009b). What is the normative role of logic? *Proceedings of the Aristotelian Society*, 83(1), 251–268. https://doi.org/10.1111/j.1467-8349.2009.00181.x.

Fogal, D. (2019). Rational requirements and the primacy of pressure. Mind. https://doi.org/10.1093/mind/ fzz038.

Greenspan, P. S. (1975). Conditional oughts and hypothetical imperatives. *Journal of Philosophy*, 72(10), 259–276. https://doi.org/10.2307/2024734.

Harman, G. (1986). Change in view: Principles of reasoning. MIT Press.

Kaplan, M. (1996). Decision theory as philosophy. Cambridge University Press. ISBN 978-0521624961.



Keefe, R. (2014). What logical pluralism cannot be. Synthese, 191(7), 1375–1390. https://doi.org/10. 1007/s11229-013-0333-x.

- Kouri Kissel, T., & Shapiro, S. (2017). Logical puralism and normativity. *Inquiry*, 63(3–4), 389–410. https://doi.org/10.1080/0020174x.2017.1357495.
- Lewis, D. (1988). Relevant implication. *Theoria*, 54(3), 161–174. https://doi.org/10.1111/j.1755-2567. 1988.tb00716.x.
- Lord, E. (2014). The real symmetry problem(s) for wide-scope accounts of rationality. *Philosophical Studies*, 170(3), 443–464. https://doi.org/10.1007/s11098-013-0258-8.
- Lord, E., & Sylvan, K. (2019). Prime time (for the basing relation). In J. Adam Carter & P. Bondy (Eds.), Well-founded belief: New essays on the basing relation, chapter 8. Routledge.
- MacFarlane, J. (2004). In what sense (if any) is logic normative for thought? https://johnmacfarlane.net/normativity_of_logic.pdf.
- Makinson, D. C. (1965). The paradox of the preface. Analysis, 25, 205-207.
- McHugh, C., & Way, J. (2018). What is good reasoning? *Philosophy and Phenomenological Research*, 96(1), 153–174. https://doi.org/10.1111/phpr.12299.
- Neta, R. (2019). The basing relation. *Philosophical Review*, 128(2), 179–217. https://doi.org/10.1215/00318108-7374945.
- Omori, H., & Wansing, H. (2017). 40 years of FDE: An introductory overview. *Studia Logica*, 105(6), 1021–1049. https://doi.org/10.1007/s11225-017-9748-6.
- Priest, G. (2001). Logic: One or many? In J. Woods & B. Brown (Eds.), *Logical consequences: Rival approaches*. Hermes Scientific Publishers.
- Priest, G. (2006). *Doubt truth to be a liar*. Oxford: Oxford University Press. https://doi.org/10.1093/0199263280.001.0001.
- Read, S. (2006). Monism: The one true logic. In D. DeVidi & T. Kenyon (Eds.), A logical approach to philosophy: Essays in honour of Graham Solomon, chapter 9. Springer.
- Russell, G. (2017). Logic isn't normative. *Inquiry*, 1, 1–18. https://doi.org/10.1080/0020174x.2017. 1372305.
- Ryan, S. (1991). The preface paradox. *Philosophical Studies*, 64(3), 293–307. https://doi.org/10.1007/bf00365003.
- Scanlon, T. M. (2007). Structural irrationality. In G. Brennan, R. Goodin, F. Jackson & M. Smith (Eds.), Common minds: Themes from the philosophy of Philip Pettit, chapter 4. Oxford University Press.
- Schroeder, M. (2004). The scope of instrumental reason. *Philosophical Perspectives*, 18(1), 337–364. https://doi.org/10.1111/j.1520-8583.2004.00032.x.
- Stei, E. (2019). Non-normative logical pluralism and the revenge of the normativity objection. *The Philosophical Quarterly*, 70(278), 162–177. https://doi.org/10.1093/pq/pqz040.
- Stei, E. (2020). Rivalry, normativity, and the collapse of logical pluralism. *Inquiry*, 63(3–4), 411–432. https://doi.org/10.1080/0020174x.2017.1327370.
- Steinberger, F. (2019a). Logical pluralism and logical normativity. *Philosophers' Imprint*, 19(12), 1–19. http://hdl.handle.net/2027/spo.3521354.0019.012.
- Steinberger, F. (2019b). Three ways in which logic might be normative. *The Journal of Philosophy*, 116(1), 5–31. https://doi.org/10.5840/jphil201911611.
- Turri, J. (2010). On the relationship between propositional and doxastic justification. *Philosophy and Phenomenological Research*, 80(2), 312–326. https://doi.org/10.1111/j.1933-1592.2010.00331.x.
- Way, J. (2011). The symmetry of rational requirements. Philosophical studies, 155(2), 227-239.
- Williamson, T. (1988). Equivocation and existence. Proceedings of the Aristotelian Society, 88, 109–127. http://www.jstor.org/stable/4545075.
- Williamson, T. (2017). Semantic paradoxes and abductive methodology. In B. Armour-Garb (Ed.), *Reflections on the liar*, chapter 13. Oxford University Press.
- Worsnip, A. (2015). The conflict of coherence and evidence. *Philosophy and Phenomenological Research*, 49, 1–42. https://doi.org/10.1111/phpr.12246.

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