

The Positive Argument for Impermissivism[†]

(word count: 7902—including abstract, notes, and references)

ABSTRACT. Epistemic impermissivism is the view that there is never more than one attitude it is rational to have in response to one’s total evidence. Epistemic permissivism is the denial of this claim. The debate between the permissivist and the impermissivist has proceeded, in large part, by way of providing “negative” arguments that highlight the unattractiveness of the opposing position. In light of the deadlock that has ensued, this paper has two aims. The first is to introduce the concept of a “positive” argument for impermissivism. The second is to show that this argument faces a dilemma, one that generalizes the problems that famously arise for formal constraints like the Principal of Indifference. The aim of this paper is to strengthen the argument against the impermissivist by showing that no positive argument for impermissivism is likely to succeed.

1 Introduction

A live question in epistemology is how much “slack” we should ascribe to the relation of evidential support. Can the same body of evidence justify two inconsistent sets of attitudes? Can two individuals with the same evidence, but different beliefs, both be rational?

This question of whether we should be permissivists or impermissivists has been asked and answered in a number of different ways.¹ While there are no shortage of arguments for or against either of these positions, one thing the literature does lack is a narrative about how the different cycles of the debate between the permissivist and the impermissivist are related. This discussion is a partial attempt to provide this sort of story.

[†]All acknowledgments of help have been temporarily removed in order to preserve blind review.

¹For some defenses of impermissivism, see, for instance, Feldman [2005], White [2005], Christensen [2007], Horowitz [2014, 2019], Greco and Hedden [2016], Dogramaci and Horowitz [2016]. For some defenses of permissivism, see, for instance, Rosen [2001], Douven [2009], Titelbaum [2010], Ballantyne and Coffman [2011], Kelly [2013], Meacham [2014, 2019], Schoenfield [2014, 2018], Podgorski [2016] and Titelbaum and Kopec [2018]. This is, of course, just a small sampling of the enormous literature on this topic.

Most of the recent debate between the permissivist and the impermissivist has proceeded by way of arguments that highlight the unattractiveness of the opposing position. And there seem to be compelling considerations on both sides, leading our intuitions to waver between them. On the one hand, we tend to think that our evidence ought to lead us towards the truth. This seems to be part and parcel of our very concept of evidence. On the other hand, we also tend to think that reasonable people with the exact same evidence can sometimes rationally disagree. Our intuitions about evidence pull us in different directions.

Along with the fact that our intuitions tend to waver, impermissivism is also undermined by a different set of concerns. While contemporary discussions take the evidential support relation to be an epistemic relation, early interest in this relation was as a *formal* relation that could serve as the foundation for our inductive logics. A second, well-known reason for rejecting impermissivism is the failure of formal constraints, like the Principle of Indifference, to provide us with a uniquely rational relation of this kind. In telling us not to favor some hypothesis without sufficient reason, the Principle of Indifference famously gives rise to inconsistent prescriptions. A natural question to ask is how the formal failure of the Principle of Indifference is related to the failure of arguments for impermissivism that draw upon our epistemic intuitions. While it's tempting to think that what distinguishes these two types of arguments is that one makes an appeal to logical considerations, while the other makes an appeal to epistemic considerations, such a distinction fails to explain why putatively formal constraints, like Lewis [1980]'s Principal Principle and van Fraassen [1984]'s Reflection Principle fail to give rise to the sort of inconsistency we get with the Principle of Indifference. Such a distinction equally fails to explain why, despite not giving rise to this inconsistency, it's often been claimed that no number of these more local, formal constraints can get us an impermissive support relation.

This paper provides a more adequate accounting of the ways that arguments for impermissivism go wrong by distinguishing two methodological approaches one might pursue in defending it: a positive approach and a negative approach. While the negative argument for impermissivism fails in virtue of the existence of equally compelling considerations in favor of permissivism, the positive argument for impermissivism fails *by its very own lights*. There are two ways we might deploy the positive approach, each of which generates its own form of inconsistency. On the one hand are positive arguments that give rise to a type of *quantitative* inconsistency, where what we have is a constraint that is too general to

pick out a unique set of values. This is the type of inconsistency that we famously get when we appeal to the Principle of Indifference. On the other hand are positive arguments that give rise to a type of *qualitative* inconsistency. Instead of a constraint that is too general to pick out a unique set of values, what we have, in this latter case, is a value that is too general to pick out a unique set of constraints. This is the novel type of inconsistency this discussion introduces.

One contribution this paper makes, then, is to strengthen the argument against the impermissivist. This paper develops, and then proceeds to undermine, a strategy the impermissivist might be tempted to pursue, in light of the fact that appeals to intuitions about the evidential support relation are bound to leave us deadlocked. The more important contribution this paper makes, however, is to suggest that we've been conflating two different arguments for impermissivism all along. We've been conflating an argument that assumes that impermissivism's constraints are motivated by the negative consequences that follow from denying that they hold, with a positive, constructive argument for impermissivism that attempts to justify it by providing of an actual evidential support relation with an actual set of values. These two different arguments arise out of two different ways of conceiving of the logical relationship between permissivism, impermissivism and the evidential support relation.

2 The Positive Approach

Impermissivism (or, “uniqueness”, as it is sometimes called) is the view that there is never more than one attitude it is rational to have in response to one's total evidence. Impermissivists claim that there is a unique evidential support relation that is defined over all pairs of propositions, and that, for any ordered pair of evidence proposition and hypothesis proposition, this relation delivers a unique justificatory status—either the evidence supports the hypothesis, or else it countersupports the hypothesis, or else it lends some numerical degree of support to the hypothesis.² Permissivists deny this. They maintain that there are at least some ordered pairs of evidence propositions and hypothesis propositions for which there is more than one justificatory status. They hold that the evidential support relation that defines a rational agent's doxastic state will include at least some permissive evidential situations.³

²See Titelbaum and Kopec [2018] for something very close to this description.

³Some additional notes about terminology. Following others, I'll take “impermissivism” to be synonymous with “uniqueness”, though I'll sometimes talk about the evidential support relation being “maximally impermissive” where the emphasis on uniqueness is particularly important. In the Bayesian context, “Impermissive Bayesianism” is sometimes taken to be synonymous with “Objective Bayesianism”, as opposed to “Subjective Bayesianism”. Since this particular way of making the distinction has some connotations we would likely want to avoid (*cf.* Titelbaum and Kopec [2018, fn.7]),

Many arguments for impermissivism take as their starting point intuitions about the nature of evidence. Two of the most influential of these are “the truth-guiding argument” and “the flip-flopping argument”.⁴ On the one hand, impermissivism is often motivated by the thought that our evidence should lead us towards the truth. If we reject impermissivism and allow that the same body of evidence can justify two conflicting attitudes, this feature of evidence looks like it will be impossible to maintain.

More fundamental than the idea that giving up on impermissivism means giving up on the truth-guiding function of evidence is the idea that giving up on impermissivism means sacrificing *any* meaningful notion of evidential support. Evidence that is permissive would seem to allow us to flip-flop between views. It would seem to permit us to hold both some view or its negation. It would seem to allow me to believe that the next president of the United States will be a Democrat, while also allowing me to believe that they will be a Republican. Even if we think that evidence does not always lead us to the truth, we shouldn’t think that it should be able to lead us in any direction whatsoever.⁵

While the impermissivist takes these arguments to provide strong support for her position, considerations very similar to those that motivate them can quickly be turned into an argument against it. While it might seem wrong to say that the same agent is rationally permitted to hold either of two conflicting views, for many, it seems unproblematic that two different agents can do this.⁶ At least this seems true when we are faced with certain types of questions. Whether or not permissivism or impermissivism seems like the more promising view will sometimes depend upon the details of the particular case at hand. Consider the case of a jury reaching its decision. As Rosen [2001, p.71] puts it:

It should be obvious that reasonable people can disagree, even when confronted with a single body of evidence. When a jury or a court is divided in a difficult case, the mere fact of disagreement does not mean that someone is being unreasonable. Paleontologists disagree about what killed the dinosaurs. And while it is possible that most of the parties to this dispute are irrational, this need not be the case.

We needn’t appeal to *recherche* cases, then, to motivate the thought that rationality sometimes seems to be permissive. While it seems reasonable to maintain a notion of evidential support, according

I won’t appeal to it here.

⁴I borrow these terms from Meacham [2014].

⁵The flip-flopping objection is also sometimes referred to as the arbitrariness objection. For some descriptions of it, see White [2005], Meacham [2014], Simpson [2017] and Weisberg [forthcoming].

⁶See Kelly [2013] for the distinction between intrapersonal and interpersonal impermissivism.

to which our evidence will always lead us towards the truth, it seems equally reasonable to think that our evidence will not always be unequivocal. Agents might reasonably be governed by different epistemic standards.⁷ When we are faced with different hypotheses that exemplify different epistemic virtues relative to some body of evidence—perhaps one is the simpler explanation for this evidence while the other is the more informative—it’s natural to think that rationality leaves some room to decide which of these hypotheses we should adopt. If so, rationality cannot be as objective as impermissivists want to claim.

These considerations are just the tip of the iceberg. And, of course, all of them invite responses from the other side. Some have argued that cases where a jury is rationally divided are cases where the agents in question do not share the same total evidence.⁸ Therefore, these aren’t counterexamples to impermissivism, but are merely cases that have been underdescribed. As Greco and Hedden [2016, p.368] point out, however, one thing the previous arguments for and against impermissivism all have in common is that each of them invokes first-order epistemic considerations for their view. And there seem to be compelling considerations on both sides, leading our intuitions to waver between them. Greco and Hedden attempt to break this deadlock by appealing to certain metaepistemological intuitions about the value of rationality that, they claim, favor the impermissivist.⁹

Like Greco and Hedden, I want to consider the prospects for impermissivism if we move to a different approach to defending it. However, rather than rescue impermissivism, the approach I consider will reveal a different way that it is flawed. In addition to invoking first-order epistemic considerations, what the previous arguments have in common is that they proceed, often implicitly, by way of a reductio. They provide “negative” arguments for their position by showing us that the other side cannot account for certain intuitions we have about the evidential support relation. Impermissivists claim that permissivists cannot account for our intuition that we shouldn’t flip-flop, while permissivists claim that impermissivists cannot account for our intuition that reasonable people can rationally disagree.¹⁰

We can generalize on these instances and say that a so-called negative argument for impermissivism assumes that every evidential situation is either permissive or impermissive, so that a consideration

⁷For some proponents of this argument, see White [2005] and Schoenfield [2014] and Titelbaum and Kopec [2018].

⁸See, for instance, Goldman [2007] and Hedden [2015a].

⁹For a different argument along these lines, see Dogramaci and Horowitz [2016]. I’ll return to consider this argument near the end of this paper.

¹⁰For this strategy made explicit, see Meacham [2014].

against permissivism is a reason *in favor* of impermissivism. Proponents of negative arguments for both permissivism and impermissivism conceive of these views as lying on opposite ends of the same spectrum, so that our intuitions about cases where one of these views seems implausible entails the intuition that the other view must be correct. More carefully, negative arguments infer from the fact that permissivism and impermissivism are contradictory views to the conclusion that every evidential situation must be either permissive or impermissive. Call an argument for impermissivism that rejects this “excluded middle” assumption a *positive* argument for impermissivism.¹¹

To get a better handle on the positive approach, consider that most take impermissivism to be the view that there is always *exactly one* attitude it is rational to have in response to one’s evidence. And most take permissivism to be the view that there is sometimes *more than one* attitude it is rational to have in response to one’s evidence. While these views are mutually exclusive, they are only mutually exhaustive if we’ve ruled out the possibility that there is sometimes *no* attitude it is rational to have in response to one’s evidence. While it is generally assumed that the evidential support relation is permissive by default, so that it will never fall silent like this, the positive approach rejects this assumption. Instead, it maintains that the evidential support relation is, by default, *undefined*. It leaves open that some parts of the evidential support relation may fail to say anything at all. It leaves open that some evidential situations may be neither permissive nor impermissive.¹²

By restricting the evidential support relation to those evidential situations where we have reason to think there *is* some rational response, the positive approach can preserve the intuition that permissivism and impermissivism are mutually exclusive and exhaustive views by raising the bar for what it takes to vindicate each of these positions. On the positive approach, permissivism and impermissivism are mutually exclusive and exhaustive views about the evidential situations for which there is some rational response, rather than mutually exclusive and exhaustive views about *all* evidential situations.¹³

¹¹This picture of things leaves open the possibility that there might also be a positive argument for permissivism. We’ll consider such an argument in §4.

¹²Alternatively, one might define the positive approach as denying that cases where the evidential support relation “fails to say anything at all” ought to be identified with cases where it is maximally permissive.

¹³It’s worth distinguishing this position from two different closely related ones. First, some impermissivists hold that it is indeterminate how different epistemic standards ought to be weighed against each other, while nevertheless still maintaining that it is determinately the case that there is a uniquely rational way of doing this. (See Greco and Hedden [2016, p. 367] for discussion of this idea.) The view I advance is the stronger, metaepistemological position, according to which, it’s not the weighting of epistemic standards that are indeterminate, but the epistemic positions of permissivism and impermissivism that are undefined—for which there is no answer, not even a vague or “mushy” answer, about whether or not one of them holds. Second, one way for some part of the evidential support relation to be undefined is for some particular agent to have never considered the proposition at issue to begin with. The view I am advancing is

One might worry that this interpretation of impermissivism changes the subject. However, it's no objection to this interpretation of impermissivism that it differs from what we tend to unreflectively assume. What *would* be an objection to this interpretation of impermissivism was if it failed to capture the spirit of the account at the heart of the debate between the permissivist and the impermissivist. To see that it doesn't fail in this way—to see that discussions about the evidential support relation are ambiguous between two different ways of understanding it—notice that the assumption that the evidential support relation is defined over every evidential situation plays no role in the way the debate between the permissivist and the impermissivist usually goes. Consider, again, the case of a jury reaching its decision. Here the permissivist and impermissivist do not take a stand on whether or not their evidence points in some direction. Instead, they begin from the assumption that it does, and then go on to disagree about whether this evidence might rationally point in two different directions. My understanding of impermissivism is, then, consistent with the spirit of the view that all parties to the debate have been assuming.¹⁴

One might resist the distinction I am attempting to draw between positive and negative arguments by pointing out that we needn't make *any* assumptions about the evidential support relation to advance an argument for impermissivism. Consider, again, the truth-guiding argument. This argument simply makes an appeal to the value of truth. On its face, it assumes nothing whatsoever about the relation of evidential support.

But consider more carefully what it would take for such an argument to succeed. To infer impermissivism from the claim that permissive evidential situations yield absurdity, in virtue of failing to be truth-guiding, such an argument must assume there is no third option of being undefined, which is also consistent with the value of truth-guidingness. Again, it seems plausible that what the appeal to the value of truth-guidingness amounts to is the claim that *conditional* on our evidence guiding us in *some* direction, it ought to guide us towards the truth. This requirement is trivially satisfied when the antecedent of this conditional fails to hold. More carefully considered, then, arguments that make the stronger, metaepistemological position, according to which the evidence itself does not license any sort of rational response.

¹⁴Granted that this interpretation of the impermissivism seems consistent with this spirit, one might nevertheless still ask whether it corresponds to a picture of evidential support that strikes us as intuitive. I think that it does. Consider that there is a distinction between when some proposition is evidence *for a proposition* and the question is when some proposition is evidence *for an agent*, in the sense, for instance, of the sort of evidential internalism defended by Silins [2005]. We might think that situations where the evidential support relation is undefined are situations where there is evidence in the second sense, but not in the first.

an appeal to certain virtues of impermissive evidential situations tacitly assume the negative approach when they infer impermissivism from the lack of such virtues in permissive evidential situations. This equally applies to arguments whose appeal to such values may be more subtle. Consider being told by an omniscient being that impermissivism is true. This seems like a pretty decisive reason to be an impermissivist. On the negative approach, it constitutes such a reason precisely because permissivism can't accommodate the value of truth-guidingness.

Since a positive argument rejects the assumption that every evidential situation is either permissive or impermissive, it cannot infer impermissivism by pointing to some general undesirable feature that all permissive situations lack, like truth-guidingness. Since it cannot defend an impermissive support relation by appealing to the way that permissivism goes wrong, the only other option is to appeal to considerations that are attractive independently of one's normative views about the evidential support relation. A positive argument is a more ambitious argument, then, in beginning from a position of *neutrality* about the evidential support relation.

To see what I mean, consider an impermissivist who thinks that the evidential support relation ought to be governed by Lewis [1980]'s Principal Principle.¹⁵ The Principal Principle tells us that absent other relevant information, our degrees of belief should conform to our beliefs about the objective chances. Unlike the more general values of being truth-guiding or non-arbitrary, the value of matching our degrees of belief to the chances is compatible with both impermissivism and permissivism. Since the Principal Principle governs only *certain* evidential situations—situations where we have evidence about the chances—it's compatible with all other evidential situations besides these being permissive, and it's equally compatible with all other evidential situations besides these being impermissive. While the Principal Principle isn't compatible with extreme permissivism, what makes it neutral, in the sense that I intend, is that endorsing it needn't make one either a permissivist or an impermissivist about the evidential support relation as a whole. It's compatible with the view that there are at least some ordered pairs of evidence propositions and hypothesis propositions for which there is more than one justificatory status.

Of course, it may be possible to give a version of the truth-guiding argument that is also compatible with permissivism. Instead of inferring that *all* evidential situations ought to be truth-guiding, from the

¹⁵See, also, Hall [1994] and Lewis [1994] for discussion of this principle.

absurdity of some situation that lacks this general value, we might infer this only for the particular case from which the intuition is being drawn. It seems plausible, for instance, that both the permissivist and the impermissivist would agree that where a scientist has strong evidence against a hypothesis, she is not permitted to believe otherwise, while perhaps still disagreeing that a unique response is required in every other situation. Thus, while the negative approach and the positive approach are mutually exclusive, the considerations they appeal to can, at least in principle, fall under both of them. The distinction between the positive and negative approach doesn't track a distinction in *subject matter*, but a distinction in *method*.

The neutrality of the positive approach confers upon it two further features. First, since a positive argument for impermissivism begins from a neutral starting point, it is, at least in some sense, a stronger argument than a negative argument. Second, since a positive argument for impermissivism does not appeal to our intuitions about the evidential support relation in general, it cannot be defeated by establishing that our intuitions on the other side are equally weighty. It can only fail or succeed *by its very own lights*. It succeeds to the extent that it is able to show that impermissivism follows from a set of assumptions that are neutral in the way just described. And it fails to the extent that the support relation it defends turns out to be incoherent or inconsistent.

Building on this suggestions, and on the contrast we are attempting to draw with the negative approach, the positive approach might be likened to certain forms of constructivism. Just as mathematical and logical constructivists deny that there is some pre-existing mathematical or logical reality with respect to which we might come to discover that some fact either holds or fails to hold, the proponent of the positive approach denies that there is some pre-existing evidential support relation governing every evidential situation, which we might come to discover is either permissive or impermissive. On the positive approach, we have no reason to think there is a "domain" of evidential constraints that precedes the reasons we have for upholding them. Just as mathematical constructivism requires that we provide an actual mathematical object, a constructive, positive argument for impermissivism requires that we provide an actual impermissive support relation with an actual set of values. The positive approach takes the perspective of one aiming to construct the "magical probability function in the sky" rather than the perspective of one trying to determine what it already recommends.¹⁶

¹⁶Of course, the motivations for mathematical constructivism are controversial and differ in interesting ways from those of logical constructivism, as well as from the sort of account I propose in this discussion. But I think this description

In light of the possibility that further appeals to intuitions about the evidential support relation might still leave us deadlocked, advancing a positive argument for impermissivism might seem like the most promising approach to defending it. However, the positive approach faces a dilemma. There are two ways we might deploy the positive approach. And each of these ways generates a form of inconsistency. On the one hand are positive arguments that give rise to a type of *quantitative* inconsistency, where what we have is a constraint that is too general to pick out a unique set of values. This is the type of inconsistency we famously get when we appeal to the Principle of Indifference. On the other hand are positive arguments that give rise to a type of *qualitative* inconsistency. Instead of a constraint that is too general to pick out a unique set of values, what we have in the latter case is a value that is too general to pick out a unique set of constraints.

It's precisely in virtue of appealing to constraints that are neutral enough to be compatible with *any* normative view about the evidential support relation as a whole that the positive argument for impermissivism gives rise to inconsistency. This leaves the impermissivist with the following more general dilemma. Either she adopts the negative approach, in which case her appeal to impermissive considerations are defeated by equally persuasive permissive considerations. Or else she adopts the positive approach, in which case her attempt to defend a uniquely rational support relation by appealing to considerations that permissivist could accept yields some form of inconsistency.

3 Formality and Inconsistency

This section will argue that the way formal constraints on the evidential support relation have long been known to fail exemplifies the first type of inconsistency we get on the positive approach.

While contemporary discussions assume the evidential support relation to be the sort of epistemic relation considered in the previous section, arguments for impermissivism go all the way back to Hempel [1945] and Carnap [1950], both of whom believed that a uniquely rational evidential support relation could be constructed using formal or logical methods alone. As I've mentioned already, while some take the attitudes we use to define permissivism and impermissivism to be those of belief and disbelief, others like Hempel and Carnap assumed that an agent could be represented as having degrees of belief that conform to the probability axioms. Given this assumption, impermissivism can

of what these varieties of constructivism all have in common provides a useful way of illuminating the commitments of the positive approach.

be redescribed as the view that, for any body of evidence, there is a uniquely rational degree of belief an agent possessing such evidence should hold.

While there are different ways of describing how Hempel and Carnap's approaches both failed, the most famous illustration of the general failure of formal methods is Goodman [1979]'s argument that for any lawlike principle formulated using certain predicates, we can formulate a different principle with different predicates that is equally well-supported by the same body of evidence, but which generates different predictions. Since Goodman's objection applies, no matter what we take the content of our hypotheses and our evidence to be, it looks like the problem must lie with the formal methods themselves.

The failure of Carnap's and Hempel's attempts are closely linked to another failed attempt to defend impermissivism. Principles of Indifference say that where we have no more reason to favor one hypothesis over another, these hypotheses ought to be held with equal probability. This principle is also varyingly referred to as "The Maximum Entropy Principle", "Jeffrey's Rule" and "The Principle of Insufficient Reason".¹⁷ Like Carnap and Hempel's attempts, these were famously shown to generate inconsistent prescriptions. Since a probability space can be measured in any number of different ways, there will be different sets of values that are consistent with our commitment to not support some hypothesis without sufficient reason.¹⁸ Given the same body of total evidence, different interpretations of indifference will leave us with different support relations. Since this objection again holds no matter what we take our hypotheses or our evidence to be, it looks again like it is the formal methods used to get us these constraints that are at fault.

It's widely believed that the failure of these attempts suggests that no other formal argument for impermissivism is likely to succeed. Since it is in virtue of their formality that these principles fail, it might be thought that to understand these failures, we need to better understand what makes some principle formal in the first place.

A modest proposal says that to be formal is to be purely a function of logical form or logical syntax. Very roughly, a principle is formal, on this account, if its meaning is can be determined entirely by the arrangement of logical symbols in the sentences used to express it. This understanding of formality accounts for the failure of the constraints described above. It's the fact that these constraints

¹⁷See Howson and Urbach [2005] for discussion.

¹⁸For an illustration of the problem, see van Fraassen [1989].

can be described using a purely logical language that accounts for the fact that different predicates, or measures of indifference, give rise to different constraints that are consistent with the same body of evidence. Some slightly different, though closely related ways of understanding formality are as generality (cf. Frege [1893, 1897]), invariance under permutation (cf. Tarski [2002]) and content-independence. Still others have tried to spell out the distinction between formal and non-formal constraints by appealing to the distinction between wide-scope requirements and narrow-scope requirements (cf. Broome [1999]). This proliferation of options have led MacFarlane [2000] and Dutilh Novaes [2011] to suggest that we ought to take formality to be a cluster concept: a concept that is defined by a weighted list of criteria, such that no one of these criteria is either necessary or sufficient for membership.¹⁹ The cluster view can explain why the properties just described have the same general flavor. These are features that exhibit some loosely related similarities that some formal rules will have, and that will be more salient for some of the rules that have them than they are for others.

In light of the previous view, want to offer a suggestion. I want to suggest that the *neutrality* of the positive approach is a different cluster of the concept of formality. We noted earlier that one way of beginning from a position of neutrality is to appeal to impermissive constraints that don't govern all evidential situations, so that they can be endorsed by either the permissivist or the impermissivist. A different way of beginning from a position of neutrality is to appeal to *neutral* constraints that *do* generalize to all evidential situations. Plausibly, a good candidate for such constraints are the principles of language and syntax, and invariance under permutation, that one ought to be committed to regardless of one's normative intuitions about the evidential support relation. It's precisely because principles of language and syntax are neutral enough to be compatible with any normative view about the evidential support relation as a whole that they are neutral enough to be consistent with different measures of indifference. Thus, the inconsistency that formal constraints give rise to can be interpreted as a failure of the positive approach.

Earlier we noted that while the negative approach and the positive approach are mutually exclusive approaches, the considerations they appeal to can fall under both of them. This observation explains why appealing to the Principle of Indifference is promising from one perspective and hopeless from another. Consider the impermissivist who adopts the negative approach. Such an impermissivist would

¹⁹Of course, the notion of a cluster concept originates in Wittgenstein's *Philosophical Investigations* (see [I 66]).

point out, by appealing to the Principle of Indifference, that permissivism cannot accommodate the plausible idea that one ought not to adopt some hypothesis without sufficient reason. Of course, this consideration might be outweighed by others that favor the permissivist. But from the perspective of one aiming to defend impermissivism by pointing to some general feature the permissivist cannot accommodate, the fact that this general feature is compatible with different measures of indifference is unproblematic. Each of these measures represents the impermissive value of not supporting some hypothesis without sufficient reason.

Now consider an impermissivist who adopts the positive approach to defending impermissivism by appealing to the Principle of Indifference. Since this approach rejects the assumptions that the evidential support relation is either permissive or impermissive, her appeal to the Principle of Indifference is not an appeal to a general, attractive property that permissivism fails to have. Instead, her appeal to the Principle of Indifference is an appeal to the neutral values of language and syntax that ought to be acceptable to both permissivists and impermissivists

And therein lies the problem. From the perspective of one aiming to construct the evidential support relation from these neutral principles of language and of syntax, the indeterminacy the Principle of Indifference gives rise to yields inconsistency. Where success is defined in terms of being able to defend a uniquely rational evidential support relation with a certain set of properties, the Principle of Indifference fails. Thus, on the negative approach, a general, indeterminate value fails by being outweighed by some value or consideration on the other side. On the positive approach, a general, indeterminate value fails by yielding inconsistency.

4 Qualitative Inconsistency

I've argued that the neutrality of the positive approach explains why formal principles, like the Principle of Indifference, give rise to inconsistency. However, this gives rise to a puzzle. Consider, again, the Principal Principle, which says that our credences should match our beliefs about the objective chances. And consider van Fraassen [1984]'s Reflection Principle, which tells us that our current credences should line up with what we expect our future credences to recommend. Both of these principles are formal and neutral. They are formal in virtue of being partly content-independent: in virtue of offering recommendations regardless of what we take our beliefs about the chances and our future cre-

dences to be. And they are neutral in virtue of appealing to a value—deference to expertise—that one can accept whether or not one is a permissivist or impermissivist about the evidential support relation in general. But, despite this, neither of these principles, alone or in combination, give rise to the inconsistency we get with the Principle of Indifference. If it's the formality and neutrality of the Principle of Indifference that gives rise to its troubles, then this seems hard to explain.

The puzzle deepens once we notice that while these formal principles don't yield the sort of inconsistency described in the previous section, it's nevertheless often assumed, without argument, that they cannot give rise to a coherent, impermissive support relation. Consider what Hedden [2015b, p.134] says here:

It is doubtful whether we could just supplement probabilistic coherence, the Principal Principle, and Regularity with a finite number of other formal principles which would together deem irrational all the credence functions that are intuitively irrational, like those of the skeptic, the counterintuitivist, and the randomly constructed credences mentioned in the last paragraph.²⁰

An adequate account of how formal constraints fail should entail that local constraints like the Principal Principle and the Reflection Principle, which govern particular evidential situations, give rise to a version of the very same problem described in the previous section. I'll now argue that my account does just that. The assumptions of the positive approach entail that these local constraints give rise to a form of inconsistency that mirrors the inconsistency we get with global constraints like the Principle of Indifference. No matter what kinds of constraints it invokes, then, the positive approach gives rise to inconsistency.²¹

To start to see this, recall that the positive approach denies that every evidential situation must be either permissive or impermissive. Instead, it assumes that the evidential support relation is, by default, undefined. And, thus, cases where we lack some reason for thinking that there is a unique rational attitude the agent is required to hold means that, for these evidential situations, absent other considerations, this relation fails to say anything at all.

²⁰See, also, Meacham [2014, §3.3] for a similar statement of this claim.

²¹To be clear, I don't claim to offer an account of why others have believed that formal constraints are problematic. Instead, the argument of this section is intended to explain the vague, inarticulated intuition many have had that no number of these constraints can get as a coherent evidential support relation.

Why is this a problem for the impermissivist? The view I've just described has the consequence that an evidential support relation is *always* entirely constrained by whatever ideals it encodes. Consider an evidential support relation that only includes the Principal Principle. While such a relation would fail to impose constraints on most of the situations an agent might find herself in, it would still entirely constrain every part of this relation that was not undefined. For every part of the evidential support relation—which would, in this case, only include situations where we have evidence about the objective chances—there would be exactly one attitude it is rational to have in response to one's evidence. But, of course, it's implausible that a relation that is only governed by the Principal Principle ought to be regarded as maximally impermissive given that we, intuitively, take a relation that is maximally impermissive to be a relation that encodes "all of the constraints"—given that we intuitively take such a relation to be one that uniquely constrains every evidential situation.

In denying that the evidential support relation is permissive in those places where it isn't impermissive, the positive approach loses the ability to distinguish different *degrees of impermissiveness*. Instead, it entails that *any* two different evidential support relations that impose a different number of constraints are equally impermissive and are, indeed, both maximally impermissive. While this indeterminacy is troubling on its own—and while this troublesome feature of it may have been evident from the start—the more relevant point is that it yields a form of inconsistency on the positive approach. One might object that while the Principal Principle is a neutral constraint when taken on its own it surely isn't a neutral constraint—it surely isn't a constraint that the permissivist could accept—where it is the only constraint on the evidential support relation. However, though we are clearly appealing to an assumption that the permissivist could not hold, it's difficult to see how we are here appealing to some *value* the permissivist could not hold. To the extent that we are, we make an appeal to the negative approach.

The distinction between the positive and negative approach also helps us to see, once again, why the idea of constructing an evidential support relation from local constraints may not have initially seemed troubling. From the perspective of the negative approach, it's unproblematic that there are a plurality of evidential support relations that are maximally impermissive since each of these relations instantiates the general values (of non-arbitrariness, etc.) that make impermissivism so attractive. It's only from the perspective of the positive approach, which aims to defend a uniquely rational evidential support relation by appealing to constraints the permissivist could accept, that these results are problematic.

Since *any* two different evidential support relations that impose a different number of constraints are equally impermissive and are, indeed, both maximally impermissive, there is no way to adjudicate between evidential support relations with different numbers of constraints. While commonsense may tell us to reject an evidential support relation that only includes the Principal Principle, the inconsistency illustrated by the previous toy case generalizes to *any* two candidates for the impermissive support relation—even ones that encode very large numbers of constraints—such that one encodes N constraints and one encodes $N-1$ constraints.

This problem mirrors the problem for the Principle of Indifference described in the previous section. Just as there are different measures of indifference, and so inconsistent measures of indifference, that might be used to represent the uniquely rational impermissive support relation, so too are there different sets of evidential support relations, and so inconsistent sets of support relations, that might represent the uniquely rational impermissive support relation. As with the principles of language and syntax, it's precisely because local constraints are neutral enough to be compatible with both permissivism and impermissivism that they are neutral enough to be compatible with different, and so inconsistent, evidential support relations.

One might worry that my argument overgenerates. The aim of this section has been to explain the inconsistency of formal constraints. But we could have run the previous argument on *any* two sets of constraints, not merely sets of constraints that are putatively formal. It's easy to see, however, that the failure of the positive argument described in this section actually is due to a formal features of the situation it describes. In making the value of being maximally impermissive consistent with different evidential support relations defined over different of evidential situations, the argument of this section *makes the value of being maximally impermissive content-independent*. The value of being maximally impermissive is realized by evidential support relations with different contents—in the same way that the value of indifference is realized by evidential support relations with different values. The reason we regard the Principal Principle and the Reflection Principle as paradigmatically formal constraints is that they individuate evidential situations in a particularly perspicuous way. But the main insight of this section is that the positive approach has the effect of formalizing *all* local constraints. And, thus, the positive approach can explain why all formal constraints, as neutral constraints, give rise to inconsistency.

Finally, one might object that just as it's possible to plump for some particular measure of indiffer-

ence as being the uniquely correct one, it's also possible to plump for some particular evidential support relation as being the uniquely correct one. However, if I've established that constructing the evidential support relation out of local constraints yields a version of the problem that we get with the Principle of Indifference, I will have taken myself to have established enough. I do think we can say something more interesting, in both cases, which is that the assumptions of the positive approach allow us to turn the sort of indeterminacy these cases clearly involve into a form of inconsistency that undermines impermissivism. It's possible we might be able to supplement the positive approach with some further argument to get us this relation—though I suspect that any such supplemental argument will need to adopt the negative approach, I won't argue for that here. The modest, but interesting claim I want to defend is that what I've called the positive approach is alone insufficient to get us such a relation.

Summing up, then, there are two different measures of the strength of a constraint. On the one hand, a constraint might be strong in virtue of governing a *maximal number of evidential situations*. This is what makes global constraints like the Principle of Indifference strong constraints. On the other hand, a constraint might be strong in virtue of assigning hypotheses a unique or *maximally constraining value* in whatever evidential situations it governs. This is what makes local constraints like the Principal Principle and the Reflection Principle strong constraints. We've now seen that each of these types of impermissive constraints gives rise to some form of inconsistency. Where we attempt to constrain a maximal number of evidential situations, as with the Principle of Indifference, the *values* we assign our hypotheses will be inconsistent. And, thus, we get a type of quantitative inconsistency in the set of evidential support relations that are deemed to be maximally impermissive. On the other hand, where we attempt to maximally constrain individual evidential situations with local constraints, the set of *evidential situations* that are maximally constrained in this way will be inconsistent. Without the benefit of being able to take those parts of the evidential support relation that aren't impermissive to be permissive, the value of being 'maximally impermissive' is too general to pick out a unique set of constraints. And, thus, we get a type of *qualitative* inconsistency in the set of evidential support relations that are deemed to be maximally impermissive.

In appealing to assumptions that are weak enough to be consistent with the *denial* of impermissivism to *defend* impermissivism, the positive approach tries to get too much out of too little. This is

what grounds the inconsistency in each of these cases.

There's one last loose end. For my argument to tip the scales in favor of the permissivist, it must be established that there is a positive argument for permissivism that does not give rise to similar problems. And one might doubt whether this can be done. We've defined a positive argument for impermissivism as an argument that aims to construct an impermissive support relation by appealing to neutral constraints. Analogously, we can define a positive argument for permissivism as an argument that aims to construct a permissive support relation by appealing to neutral constraints.

One reason to worry about the prospects of a positive argument for permissivism is that *any* reason we have to deem some particular evidential situation to be permissive will be one the impermissivist is unable to accept, given that a single permissive evidential situation entails that the relation as a whole is not impermissive. However, we need to be careful. Earlier we said that what makes the Principal Principle neutral is that, even though it isn't compatible with extreme permissivism, it does not govern evidential situations where we don't have evidence about the objective chances. Analogously, a reason we have to take some particular evidential situation to be permissive may be neutral, even if it isn't compatible with extreme impermissivism, so long as it does not govern other evidential situations. And reasons like these seem ubiquitous. One might think that a juror with a set of conflicting evidence in a low stakes trial can go either way without also thinking that this sort of permissive attitude ought to govern different juries with different bodies of evidence, or different individuals in different evidential situations.

Given this, it's easy to see that a positive argument for permissivism would not be vulnerable to the objection I've raised against the impermissivist. The inconsistency this paper has described arises because, in denying that the evidential support relation is permissive in those places where it isn't impermissive, the positive approach loses the ability to distinguish different degrees of impermissiveness. However, the permissivist isn't in an analogous position. Consider a permissivist who endorses the Principal Principle, but who also thinks that our response to cases where we have evidence about our future credences warrants a permissive response. She needn't say that the support relation in question is *just as permissive* as a support relation that is governed by both the Principal Principle and the Reflection Principle. Since permissivism itself is a view that comes in degrees, it needn't rely on the assumption that every evidential support relation is either permissive or impermissive to countenance

degrees of permissiveness. Thus, permissivism is able to say that the first relation is more permissive than the second. More generally, she can say that, for any two evidential support relations such that the first contains more permissive situations, the first is *more permissive* than the second. She is not committed to saying that both are maximally permissive.

Why can't the impermissivist make the same move? Why can't she simply say that while extreme impermissivism is impossible to capture without inconsistency, we can capture the sort of moderate impermissivism, which is, after all, just moderate permissivism from a different angle? For the impermissivist to do this would be for her to give up the game. We defined impermissivism at the beginning of this discussion as "uniqueness", and we defined permissivism as the denial of impermissivism. While it's possible to reverse these logical roles and define impermissivism as the denial of extreme permissivism, this would be to abandon the distinction that is of interest to epistemologists. Arguably, the position that anything goes all of the time, epistemically speaking, isn't one that any of the parties to this debate have any interest in defending. I've appealed to the Principal Principle throughout this discussion, in part, because it provides what I take to be a pretty good piece of evidence in support of the idea that extreme permissivism is a non-starter. While it's true, then, that it's the fact that permissivism, as the denial of impermissivism, is a much weaker claim to defend that makes the inconsistency described in this paper a problem for the impermissivist alone, this perspective is not arbitrary. It is the perspective that picks out the positions that these parties have taken to be worthy of defending.

5 Conclusion

The aim of this paper has been to reorient the debate about the evidential support relation around two approaches one might pursue in defending impermissivism. Doing this has revealed that the impermissivist is in a worse position than we had previously assumed. In redescribing the failure of formal constraints as the failure of a positive argument for impermissivism, we are left with a more general indictment of impermissivism, and thus with a stronger reason for abandoning it.

I want to conclude by briefly gesturing towards a way the results of this discussion might be put to further use. We began by noting that one alternative to standard attempts to defend impermissivism is to appeal to a negative, metaepistemological argument for impermissivism. This was the strategy advanced by Greco and Hedden. A second strategy, the one that this paper has pursued, involved appeal-

ing to a positive, epistemological argument for impermissivism. However, one might wonder whether there is a hybrid of these strategies that escapes the dilemma this paper has raised: namely, a *positive, metaepistemological* argument for impermissivism. One argument that might help us test out this idea is the defense of impermissivism mounted in Dogramaci and Horowitz [2016]. Like Greco and Hedden [2016], Dogramaci and Horowitz [2016] claim that impermissivism can be defended by considering the connection between our epistemic practices and the value of rationality. They argue that impermissivism provides the best explanation for the value of our social practice of epistemically evaluating one another. While the authors almost certainly wouldn't endorse the definition of a positive argument I've developed and defended in this paper, they do describe their account as a "positive argument" that provides an alternative to "...arguments aimed at exposing absurdities that follow from permissivism." [p.131]

While it goes beyond this discussion to consider Dogramaci and Horowitz's argument, there is reason to think that, insofar as they advance the type of positive argument this paper has considered, their argument will be vulnerable to the same type of objection this paper has raised. One of the lessons of this discussion has been that, in reorienting the debate about the evidential support relation around a distinction in method, we de-emphasize distinctions in subject matter. In emphasizing the distinction between the positive and negative approach, this discussion has de-emphasized the distinction between arguments that appeal to logical considerations and arguments that appeal to epistemic considerations. It seems natural to think, then, that focusing on this distinction will also de-emphasize the distinction between arguments that appeal to epistemic considerations and arguments that appeal to metaepistemic considerations, in a way that would allow us to ascribe to them the very same problem.²² While this thought might still seem a bit obscure, I hope the discussion of this paper has helped make it a bit clearer.

References

- Nathan Ballantyne and EJ Coffman. *Uniqueness, evidence, and rationality*. Ann Arbor, MI: Michigan Publishing, University of Michigan Library, 2011.
- John Broome. Normative requirements. *Ratio*, 12(4):398–419, 1999.
- Rudolf Carnap. *Logical foundations of probability*. 1950.

²²I argue for this in [redacted].

- David Christensen. Does murphy's law apply in epistemology? self-doubt and rational ideals. *Oxford studies in epistemology*, 2(2007):3–31, 2007.
- Sinan Dogramaci and Sophie Horowitz. An argument for uniqueness about evidential support. *Philosophical Issues*, 26(1):130–147, 2016.
- Igor Douven. Uniqueness revisited. *American Philosophical Quarterly*, 46(4):347–361, 2009.
- Catarina Dutilh Novaes. The different ways in which logic is (said to be) formal. *History and Philosophy of Logic*, 32(4):303–332, 2011.
- Richard Feldman. Respecting the evidence. *Philosophical Perspectives*, 19(1):95–119, 2005.
- Gottlob Frege. The basic laws of arithmetic: Volume 1. *The Frege Reader. Oxford: Blackwell.*(1906/84).“*The Foundations of Geometry: Second Series.*” In Brian McGuinness (ed.), *Collected Papers on Mathematics, Logic, and Philosophy*, pages 293–340, 1893.
- Gottlob Frege. Frege 1979. chapter Logic, pages 126–151. 1897.
- Alvin I Goldman. Epistemic relativism and reasonable disagreement. 2007.
- Nelson Goodman. Fact, fiction and forecast. 1979.
- Daniel Greco and Brian Hedden. Uniqueness and metaepistemology. *The Journal of Philosophy*, 113(8):365–395, 2016.
- Ned Hall. Correcting the guide to objective chance. *Mind*, 103(412):505–517, 1994.
- Brian Hedden. Time-slice rationality. *Mind*, 124(494):449–491, 2015a.
- Brian Hedden. *Reasons without persons: rationality, identity, and time*. OUP Oxford, 2015b.
- Carl G Hempel. Studies in the logic of confirmation (i.). *Mind*, 54(213):1–26, 1945.
- Sophie Horowitz. Immoderately rational. *Philosophical Studies*, 167(1):41–56, 2014.
- Sophie Horowitz. The truth problem for permissivism. *The Journal of Philosophy*, 116(5):237–262, 2019.
- C Howson and P Urbach. Scientific reasoning: The bayesian approach , 2005. *Open Court, Chicago*, 2005.
- Thomas Kelly. Evidence can be permissive. In Matthias Steup and John Turri, editors, *Contemporary Debates in Epistemology*, page 298. Blackwell, 2013.
- David Lewis. A subjectivist's guide to objective chance. In *Ids*, pages 267–297. Springer, 1980.
- David Lewis. Humean supervenience debugged. *Mind*, 103(412):473–490, 1994.
- John MacFarlane. What does it mean to say that logic is formal? *Dissertation*, 2000.
- Christopher JG Meacham. Impermissive bayesianism. *Erkenntnis*, 79(6):1185–1217, 2014.
- Christopher JG Meacham. Deference and uniqueness. *Philosophical Studies*, 176(3):709–732, 2019.
- Abelard Podgorski. Dynamic permissivism. *Philosophical Studies*, 173(7):1923–1939, 2016.

- Gideon Rosen. Nominalism, naturalism, epistemic relativism. *Philosophical Perspectives*, 15:69–91, 2001.
- Miriam Schoenfield. Permission to believe: Why permissivism is true and what it tells us about irrelevant influences on belief. *Noûs*, 48(2):193–218, 2014.
- Miriam Schoenfield. Permissivism and the value of rationality a challenge to the uniqueness thesis. *Philosophy and phenomenological research*, 2018.
- Nicholas Silins. Deception and evidence. *Philosophical Perspectives*, 19:375–404, 2005.
- Robert Mark Simpson. Permissivism and the arbitrariness objection. *Episteme*, 14(4):519–538, 2017.
- Alfred Tarski. On the concept of following logically. *History and Philosophy of Logic*, 23(3):155–196, 2002.
- Michael G Titelbaum. "not enough there there". evidence, reasons and language independence. *Philosophical Perspectives*, 24:477–528, 2010.
- Michael G Titelbaum and Matthew Kopec. When rational reasoners reason differently. 2018.
- Bas C van Fraassen. Laws and symmetry. 1989.
- C van Fraassen. Belief and the will. *The Journal of Philosophy*, 81(5):235–256, 1984.
- Jonathan Weisberg. Could've thought otherwise. *Philosopher's Imprint*, forthcoming.
- Roger White. Epistemic permissiveness. *Philosophical perspectives*, 19(1):445–459, 2005.