# PLAUSIBLE PERMISSIVISM

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ABSTRACT. Richard Feldman's Uniqueness Thesis holds that "a body of evidence justifies at most one proposition out of a competing set of propositions". The opposing position, permissivism, allows distinct rational agents to adopt differing attitudes towards a proposition given the same body of evidence. We assess various motivations that have been offered for Uniqueness, including: concerns about achieving consensus, a strong form of evidentialism, worries about epistemically arbitrary influences on belief, a focus on truth-conduciveness, and consequences for peer disagreement. We argue that each of these motivations either misunderstands the commitments of permissivism or is question-begging. Better understanding permissivism makes it a much more plausible position.

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Many philosophers think an individual's evidence places strong constraints on what she may rationally believe. The Uniqueness Thesis takes this idea to an extreme, holding (roughly) that any body of evidence mandates a unique set of rational attitudes. While this thesis may seem implausible on its face, it is remarkably popular in epistemology, and many epistemological discussions proceed from the assumption that Uniqueness is true.

Each of the authors of this essay has argued elsewhere against the Uniqueness Thesis. Our goal here is to lay out and evaluate major arguments for it. Ultimately we will conclude that the main arguments for Uniqueness available in the literature are unconvincing.<sup>1</sup> But as we go along we will also identify various motivations for Uniqueness underlying those arguments. The motivations are familiar, intuitively appealing, and in many cases ground well-known philosophical positions. Yet once they are unearthed, it becomes apparent that some of these motivations are question-begging in the context of defending Uniqueness, while others misunderstand the commitments of the position that denies Uniqueness (so-called "permissivism").<sup>2</sup> Permissivism is often depicted as an absurd and arbitrary,

<sup>&</sup>lt;sup>1</sup>We won't pretend to canvass *all* of the available arguments, especially since the Uniqueness literature is burgeoning right now. (For a comprehensive survey, see (Kopec and Titelbaum ta).) But we will cover the arguments that have been most historically significant in making the Uniqueness Thesis attractive to a wide variety of epistemologists and other philosophers.

<sup>&</sup>lt;sup>2</sup>We therefore feel much the way about the Uniqueness Thesis that Cappelen and Dever (2013, pp. 40–41) feel about a principle called "IIC" (the details of which are irrelevant here):

Our strategy is to engage with IIC. We should note right away that this isn't an easy task since there are few real arguments out there to engage with. Put simply, the remarks prominent philosophers make about [IIC] don't seem very plausible candidates for establishing IIC. As a result, we structure the remainder of the chapter around what we call "Motivations." They're not really arguments, but they are observations that seem to us to play an important role in the widespread endorsement of IIC. There is a danger here that we are very much aware of: suppose A endorses thesis T, but doesn't tell us why. We

anything-goes epistemology, disconnected from the pursuit of truth and failing to respect matters of epistemic importance. If permissivism really had these features, they would constitute good reasons to reject the view. But it doesn't.

In Section 1 of this essay, we disambiguate different versions of the Uniqueness Thesis and discuss the nature of permissivist positions. Section 2 identifies another distinction among Uniqueness theses, then assesses the connections between Uniqueness, diachronic consistency, objectivity in inquiry, and consensus among inquirers. Section 3 examines the charge that permissivism allows epistemically irrelevant factors to causally influence agents' attitudes. Section 4 presents an example, the Reasoning Room, that illustrates permissivism as a truth-conducive epistemology and clarifies its connections to peer disagreement. Finally, Section 5 summarizes our responses to the motivations for Uniqueness presented so far, and presents one further motivation which—while difficult for us to precisely articulate—is also difficult for us to entirely dismiss.

## 1. Varieties of Uniqueness

When Richard Feldman introduced the Uniqueness Thesis in his (2007), he defined it as follows:

This is the idea that a body of evidence justifies at most one proposition out of a competing set of propositions (e.g., one theory out of a bunch of exclusive alternatives) and that it justifies at most one attitude toward any particular proposition. (p. 205)

Describing himself as "following Feldman," Roger White  $(2005)^3$  argued for the Uniqueness Thesis, but defined it this way:

Given one's total evidence, there is a unique rational doxastic attitude that one can take to any proposition. (p. 445)

Those two theses do not say the same thing. In fact, Feldman's thesis says two distinct things (it's a conjunction), and White's thesis says something that is identical to neither of Feldman's conjuncts. The first thing Feldman says relates evidence to *propositions*, talking about which propositions are justified by a body of evidence. The second thing Feldman says relates evidence to *attitudes*. White's thesis then relates evidence to rational attitudes taken by *people*. So we really have three theses here:

**Propositional Uniqueness:** Given any body of evidence and proposition, the evidence all-things-considered justifies either the proposition, its negation, or neither.

then try to figure out why she endorses T. If in doing so, the candidates we come up with all fail to establish T, there's the immediate suspicion that we've been uncharitable and that either there are some other (and better) reasons for endorsing T or that A didn't endorse T.... With respect to the first option: we would be delighted if someone could respond to this book by constructing better arguments for IIC. That would really move the debate forward.

<sup>&</sup>lt;sup>3</sup>Though Feldman's article was officially published in 2007, a draft had been circulating for a number of years before that. This explains how White could be "following Feldman" despite the fact that White's publication date came first.

**Attitudinal Uniqueness:** Given any body of evidence and proposition, the evidence all-things considered justifies at most one of the following attitudes toward the proposition: belief, disbelief, or suspension.

**Personal Uniqueness:** Given any body of evidence and proposition, there is at most one doxastic attitude that any agent with that total evidence is rationally permitted to take toward the proposition.

Propositional Uniqueness is not identical to the first conjunct of Feldman's Uniqueness Thesis, but is entailed by that conjunct. Attitudinal Uniqueness is Feldman's second conjunct. Personal Uniqueness is White's Uniqueness Thesis.<sup>4</sup> We have framed the three theses in qualitative terms, assuming that the attitudes under study are belief, disbelief, and suspension of judgment. Analogous theses exist for other types of doxastic attitudes, such as comparative confidence judgments or quantitative degrees of belief (credences). For credences they would run:

**Propositional Uniqueness**°: Given any body of evidence and proposition, the proposition is all-things-considered justified/confirmed/supported to a specific degree in light of that evidence.

Attitudinal Uniqueness°: Given any body of evidence and proposition, at most one specific degree of belief in the proposition is all-things-considered justified in light of that evidence.

**Personal Uniqueness**°: Given any body of evidence and proposition, there is at most one specific degree of belief that any agent with that total evidence is rationally permitted to assign the proposition.

In what follows we'll jump between these different framings of the theses depending on whether we're discussing full beliefs or credences. The crucial point is that each set of three is arranged in the order in which many epistemologists argue from one thesis to another. Feldman, for instance, seems to think that a body of evidence justifies belief in a proposition only if it justifies that proposition (and justifies disbelief only if it justifies the negation, etc.). So he moves from Propositional Uniqueness to Attitudinal Uniqueness. Feldman then assumes that rationality requires an agent to adopt the attitude supported by that agent's total evidence, which takes him to something like Personal Uniqueness (though he doesn't include this conclusion as a conjunct of his official Uniqueness Thesis).<sup>5</sup>

<sup>&</sup>lt;sup>4</sup>Feldman and White differ slightly in that Feldman's formulations seem to explicitly allow for the possibility of epistemic rational dilemmas—situations in which no attitude toward a particular proposition is rationally permissible for an agent—while White's do not. We have built "at most one" expressions into our formulations of Uniqueness to allow for rational dilemmas. (See (Kopec 2015, note 4) for a reason to think that such dilemmas are possible and the "at most one" formulations preferable.) But since neither Feldman nor White focuses on this issue, and we don't intend to either, going forward we will ignore the possibility that some situations leave no rationally permissible doxastic options.

Notice also that it might sometimes be rationally permissible for an agent to adopt *no* doxastic attitude toward a proposition, because she has never entertained that proposition. Personal Uniqueness concerns only how many attitudes are permissible for an agent to adopt toward a proposition once she has come to assign it some attitude. Again, to streamline argumentation we will set aside this complication and simply assume that all agents under discussion have assigned attitudes to the relevant propositions.

<sup>&</sup>lt;sup>5</sup>To some people it sounds off—perhaps like a category mistake—to say that one proposition justifies another. According to these folks one may say that evidence justifies belief in a hypothesis, but not that the evidence justifies the hypothesis itself. Though we've adopted the usage directly from Feldman ("a body of evidence justifies at most one proposition"), perhaps Feldman's

Propositional Uniqueness does not entail Attitudinal or Personal Uniqueness by itself. For instance, many people find Personal Uniqueness intuitively implausible because it is too cognitively demanding, especially in its degree-valued formulation. Perhaps Attitudinal Uniqueness is true and for any body of evidence there is a unique credence that evidence supports. But can we really expect agents to perfectly discern that credence, down to arbitrarily many decimal points? One might think that while the relation of evidence to attitudes is precise, agents can be granted a bit of leeway in approximating rational attitudes. If evidence E justifies a credence in H of exactly 0.7, an agent could be rational while assigning H a credence anywhere roughly in that vicinity. To adopt this position would be to deny that rationality always requires an agent to adopt the unique attitude supported by her total evidence; it would be to endorse Attitudinal Uniqueness but not Personal.

So Attitudinal Uniqueness is not sufficient for Personal; it could also be argued that Propositional is not sufficient for Attitudinal. Nevertheless, each thesis is necessary for the ones that come after. It seems hard to maintain that a unique attitude is rationally required of any agent with a particular body of evidence (Personal Uniqueness) without tracing that requirement back to a unique relation between the evidence and that attitude (Attitudinal Uniqueness). It is then difficult to establish a unique relation between the evidence and attitude without relying on some unique relationship between the evidence and the proposition toward which that attitude is taken (Propositional Uniqueness).

White calls people who deny his Uniqueness Thesis "permissivists". A permissivist might deny Personal Uniqueness but maintain Propositional and Attitudinal, for instance because she was worried about cognitive demands on agents and whether it's realistic to require them to see all the facts about evidential support. We, however, deny Personal Uniqueness because we deny Attitudinal Uniqueness and Propositional Uniqueness as well. We don't believe there *are* evidential support facts of the sort Propositional Uniqueness implies.

How can one deny the existence of facts about evidential support? It's important to see exactly what sort of facts we're denying. Propositional Uniqueness asserts the existence of a two-place function defined over all pairs of propositions. Assuming any body of evidence can be represented as a conjunctive proposition, Propositional Uniqueness asserts the existence of a function that takes any ordered pair of evidence proposition and hypothesis proposition and returns what we might call a "justificatory status". (In the qualitative formulation that status is either justification of the proposition, anti-justification, or neither. In the degreed formulation the status is a numerical degree of support.) We admit that for some pairs of evidence and hypothesis one can determine justificatory status simply from those two propositions themselves. This occurs in deductive cases: if the evidence entails the hypothesis, then it all-things-considered justifies that proposition; and if the evidence refutes the hypothesis then it justifies its negation. But deductive cases are a very special case among arbitrarily selected pairs of propositions. We

locution is elliptical. In any case, when one considers the degree-valued formulation Propositional Uniqueness° it certainly seems appropriate to discuss one proposition's confirming another. And perhaps for the qualitative case one could focus on the idea that propositional evidence provides justification for a proposition?

<sup>&</sup>lt;sup>6</sup>If evidence is factive, then the conjunction representing an agent's total evidence must always be logically consistent, so the function under discussion need not be defined for ordered pairs containing inconsistent evidence propositions.

maintain that for many other evidence/hypothesis pairs, support facts obtain only relative to a third *relatum*; absent the specification of that third *relatum*, there simply is no matter of fact about whether the evidence justifies the hypothesis.

A good example of an epistemological view that denies Propositional Uniqueness in this fashion is Subjective Bayesianism. Nothing we argue in this essay will depend on endorsing Subjective Bayesianism, or any kind of Bayesianism whatsoever. But Subjective Bayesianism nicely illustrates a number of important distinctions in the vicinity, and is familiar enough to provide a handy proxy for a number of similar permissivisms. Also, as a historically prominent view Subjective Bayesianism has prompted many Uniqueness adherents to explain their objections to permissivism. So we will often use Subjective Bayesianism as our archetypical permissivist view going forward.

In general, Bayesians hold that any rational agent can be represented as adhering to a particular "hypothetical prior" function, which we will label "cr<sub>h</sub>". The agent's credences at a given time can be obtained by conditionalizing her hypothetical prior on her total evidence at that time. A body of total evidence E supports a hypothesis H for the agent just in case  $\operatorname{cr_h}(H|E) > \operatorname{cr_h}(H)$ . Notice that facts about evidential support are therefore relative to the hypothetical prior of the agent in question. We can think of an agent's hypothetical prior as representing her "evidential standards"—antecedent to the influence of any contingent evidence, the hypothetical prior encodes how an agent would respond to any package of evidence she might encounter, and which bodies of evidence she would take to support which hypotheses.

Some Bayesians—we'll call them "Objective Bayesians"—believe there is a unique rational hypothetical prior. In that case, whether a body of evidence supports a hypothesis is simply a matter of what that hypothetical prior says about the pair. So while evidential support is relative to that hypothetical prior, we need not treat it as an additional input to the evidential support function, since it will always have a constant value (so to speak). If there is only one rational hypothetical prior, Propositional Uniqueness is true. Yet many Bayesians (we'll call them "Subjective Bayesians") believe multiple hypothetical priors are rationally acceptable. Two rational individuals could apply different hypothetical priors—representing their differing evidential standards—so that the same body of evidence supports a hypothesis for one of them but countersupports it for the other.

One variety of Subjective Bayesianism takes this view to an extreme. Extreme Subjective Bayesians believe the only rational constraints on hypothetical priors are the probability axioms. On that view, there is a two-place support fact for evidence and hypothesis exactly when those propositions stand in a special deductive relation (entailment, refutation, etc.). Absent such a deductive relation, evidence can be said to support a hypothesis only once one has specified a particular hypothetical prior. For any non-deductively-related E and H, there will exist some  $\operatorname{cr}_h$  on which E supports H and some other  $\operatorname{cr}_h$  on which E countersupports H.<sup>8</sup> For the vast

<sup>&</sup>lt;sup>7</sup>The "Subjective/Objective Bayesian" terminology has been used in a variety of ways in the Bayesian literature, and we don't want to wade into that history here. For purposes of this essay one can treat our use of these terms as stipulative. A classic example of an Objective Bayesian position in our sense is Carnap's early theory of confirmation in his (1950). Meacham (2014) uses the term "Impermissive Bayesianism" for what we are calling "Objective Bayesianism".

<sup>&</sup>lt;sup>8</sup>Moreover, for any value x strictly between 0 and 1, there will be a hypothetical prior  $\operatorname{cr}_h$  on which total evidence E requires credence x in H.

preponderance of proposition pairs, there simply are no two-place justification facts of the sort Propositional Uniqueness asserts.<sup>9</sup>

Why would one take the seemingly-radical step of denying Propositional Uniqueness (and therefore Attitudinal Uniqueness, and Personal Uniqueness)? Each author of this essay has his own reasons. Kopec (ms), roughly speaking, views epistemic rationality as a subspecies of goal-oriented practical rationality. Among an agent's practical goals are various epistemic goals; it's then epistemically rational for the agent to hold those attitudes that constitute the most effective means of pursuing her epistemic goals. Different agents are permitted to have different epistemic goals, so rational agents may vary in the conclusions they draw from identical bodies of evidence.

Titelbaum (2010) argues that if there is a unique evidential support relation that extends beyond deductive cases, it must treat some predicates differently from others (think of "green" and "grue"). For agents to determine which bodies of evidence support which hypotheses, they must be able to differentiate the preferred predicates. If predicate preference must be determined from empirical facts, it will be impossible for agents to make that determination, since they must know which predicates are preferred before they can determine what empirical evidence supports. So one is left with either an extreme externalism on which agents cannot determine what their evidence supports, or an extreme apriorism on which preferred predicates, natural properties, or some such can be discerned a priori. Titelbaum would rather deny Propositional Uniqueness and accept an Extreme Subjective Bayesianism than adopt either of those other extreme positions.<sup>10</sup>

Notice that Titelbaum's position is committed to an Extreme Subjective Bayesianism, while Kopec's need not be. Distinguishing Extreme from moderate versions of Subjective Bayesianism is important in responding to a common attack on the view. Suppes writes,

Given certain prior information is one a priori distribution as reasonable as any other? As far as I can see there is nothing in my or Savage's axioms which prevents an affirmative answer to this question. Yet if a man had bought grapes at this store on fifteen previous occasions and had always got green or ripe but never rotten grapes, and if he had no other information prior to sampling the grapes, I for one would regard as unreasonable an a priori distribution which assigned a probability of 2/3 to the rotten state. Unfortunately, though I am prepared to reject this one distribution as unreasonable, I am not prepared to say what I think is optimal. (Suppes 1956, p. 72)

<sup>&</sup>lt;sup>9</sup>Jason Decker also holds that evidential support is a three-place relation, with the third relatum being an *interpretation* of one's evidence. He writes, "A body of evidence isn't the right sort of thing to support a proposition...only an interpreted body of evidence can serve such a role." (2012, p. 778) Decker maintains that there can be distinct yet equally rational ways to interpret one and the same body of evidence.

 $<sup>^{10}</sup>$ (Titelbaum 2010) argues against the existence of a three-place evidential support relation "evidence E favors hypothesis  $H_1$  over hypothesis  $H_2$ ". This allows the argument to address contrastivist views which deny the existence of two-place evidential support relations (E justifies H) but accept such three-place relations. Since contrastivism will not be at issue in this essay, we will focus on arguments for and against a two-place relation.

Liberality about evidential standards (hypothetical priors) seems to permit inductive practices that are not only unreasonable, but downright *crazy*. As Bertrand Russell writes with respect to the general problem of induction,

It is therefore important to discover whether there is any answer to Hume within a framework of philosophy that is wholly or mainly empirical. If not, there is no intellectual difference between sanity and insanity. The lunatic who believes he is a poached egg is to be condemned solely on the ground that he is in a minority, or rather—since we must not assume democracy—on the ground that the government does not agree with him. This is a desparate point of view, and it must be hoped that there is some way of escaping from it. (Russell 1961, p. 646)

The Extreme Subjective Bayesian needs a response to the objection that her position permits hypothetical priors licensing crazy inductive practices. (Perhaps she can build on Russell's suggestion that the "craziness" need not be a mark of irrationality but instead merely a mark of severe atypicality. But a moderate Subjective Bayesian may happily rule out some hypothetical priors as irrational, perhaps on the grounds that they are counterinductive or allow no learning from experience. For present purposes the key point is that ruling out *some* evidential standards on the grounds that they are crazy or unreasonable is a far cry from ruling out *all* the evidential standards but one. Demonstrating that it is unreasonable to believe I am a poached egg falls far short of establishing the full Uniqueness Thesis in any of its forms. So craziness considerations do not provide an argument for Uniqueness. <sup>12</sup>

# 2. DIACHRONIC CONSISTENCY, CONSENSUS, AND OBJECTIVITY

White's original presentation of his Uniqueness Thesis—"Given one's total evidence, there is a unique rational doxastic attitude that one can take to any proposition"—is ambiguous.<sup>13</sup> It can be read as either of the following (the expressions with quantifiers highlight the ambiguity):

IntraPersonal Uniqueness: Given any body of evidence, proposition, and agent, if the evidence is that agent's total evidence then there exists at most one doxastic attitude she can adopt toward the proposition without being irrational with respect to it.

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(\forall \text{ evidence } E)(\forall \text{ proposition } H)(\forall \text{ agent } X)(\exists \text{ attitude } A)
([(E \text{ is } X\text{'s total evidence})\&(X \text{ adopts an attitude other than } A \text{ toward } H)]
\supset [X \text{ is not rational with respect to } H])
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<sup>&</sup>lt;sup>11</sup>Compare also the discussion at (Earman 1992, p. 138).

<sup>&</sup>lt;sup>12</sup>The dialectic is a bit subtle here. If Extreme Subjective Bayesianism can be rejected for excessive liberality, and if Titelbaum's argument against Uniqueness has Extreme Subjective Bayesianism as its conclusion, then that argument may be rejected on the grounds that it proves too much. But this doesn't *establish* Uniqueness; it merely undermines one argument against the thesis.

 $<sup>^{13}</sup>$ A number of authors have noted this ambiguity in White's original formulation (Meacham 2014; Kelly 2014), including White himself in a later publication (White 2014).

InterPersonal Uniqueness: Given any body of evidence and proposition, there exists at most one doxastic attitude that any agent with that total evidence can adopt toward the proposition without being irrational with respect to it.

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(\forall \text{ evidence } E)(\forall \text{ proposition } H)(\exists \text{ attitude } A)(\forall \text{ agent } X)
([(E \text{ is } X\text{'s total evidence})\&(X \text{ adopts an attitude other than } A \text{ toward } H)]
\supset [X \text{ is not rational with respect to } H])
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IntraPersonal Uniqueness says that for any particular agent, there is a way rationality requires her to respond to any particular package of evidence. InterPersonal Uniqueness says that for any body of evidence, there is a single way that rationality requires all agents to respond to that evidence. White ultimately (2014) clarifies that he meant his Uniqueness Thesis to be InterPersonal Uniqueness. (This is why we adopted InterPersonal as our "Personal Uniqueness" in the previous section, and will henceforth use the phrase "the Uniqueness Thesis" to stand for InterPersonal Uniqueness unless explicitly noted otherwise.) But one of White's early arguments against permissiveness trades on the ambiguity between Intra- and InterPersonal:

The problem I want to raise is that to the extent that we reject Uniqueness, it is hard to see why one's convictions ought always to be responsive to confirming evidence. Suppose that you and I share our total evidence E. My subjective probability for P is x, and yours is lower at y. We each now obtain additional evidence E', which supports P. My confidence in P rises to x' and yours to y', which happens to be equal to the x that I held prior to obtaining E'. We have each updated our convictions appropriately in response to the new evidence. But now let's suppose that we were each fully rational in holding our different degrees of belief x and y given just evidence E. Although I've been a little more confident than you, I would have been no less rational in sharing your doubts. Why then shouldn't I just keep my confidence in P at x, if it suits me? After all, that is where I would have ended up had I enjoyed your lower degree of confidence prior to obtaining E'. If that degree of doubt would have been rational for me back then, what could be wrong with the corresponding lower credence now? (White 2005, pp. 454–5)

White's charge is that permissivism allows agents to ignore relevant evidence. E' is evidence supporting P, so in the example it should increase the main agent's credence from x up to x'. Yet (White claims) permissivism would be unable to critique an agent who kept her credence at x throughout this case, even after learning E'. Such an agent would be adopting one rationally permissible stance toward P at the initial time, and another permissible stance at the later. How could the permissivist possibly object to this approach?

Subjective Bayesians offer an answer to that question. A rational agent has a hypothetical prior, and as she receives new evidence she must update accordingly. If her credence in P at the beginning of White's story is x, and that credence commits her to a hypothetical prior which assigns x' to P after the addition of evidence E', then it would be irrational of her to arbitrarily switch to a different credence at the later time. Subjective Bayesians think that in some cases multiple hypothetical

priors are rationally permissible, and if White's case is like that then it may have been rational for *another* agent to assign y at the initial time then y' later on. That's just because the other individual adheres to a different hypothetical prior. For each individual, given the hypothetical prior she has, only one sequence of credences is permissible as the evidence accrues. That doesn't mean one sequence is the only sequence that's permissible for everybody.

In other words, Subjective Bayesianism may embrace IntraPersonal Uniqueness without thereby endorsing InterPersonal Uniqueness. And a commitment to IntraPersonal Uniqueness is sufficient to rule out the agent's assigning x to P both before and after learning E'. Since IntraPersonal Uniqueness is strictly weaker than InterPersonal (InterPersonal entails IntraPersonal, but not  $vice\ versa$ ), White's argument above for IntraPersonal Uniqueness does not establish his Uniqueness Thesis.

Now one could establish InterPersonal Uniqueness by first arguing for Intra-Personal (as above), then arguing that the only plausible way to maintain Intra-Personal is by committing to the full InterPersonal thesis. For instance, Subjective Bayesians who maintain Intra-Personal Uniqueness do so by imposing diachronic rational consistency requirements on individuals. In White's story, the agent who assigns x to P at the earlier time is committed to a hypothetical prior that constrains her rational options at the later time. If her later self owed no allegiance to her earlier opinions (and the evidential standards she employed at that earlier time), that later self would be free to arbitarily switch to any one of a number of credence assignments, including assigning x to P after learning E'.

A number of authors (e.g. (Moss 2015) and (Hedden 2015)) have begun to wonder how a Subjective Bayesian might establish the rational appeal of diachronic consistency.<sup>14</sup> More generally, they wonder why an agent's doxastic attitudes should be rationally required to line up in any particular way over time unless it's the case that each of those attitudes is rationally mandated by the agent's evidence at the relevant time. So one motivation for the Uniqueness Thesis might be that requirements of diachronic consistency are compelling, but can only be grounded in Uniqueness.

While this is a possible motivation for adopting Uniqueness, it hasn't been developed far enough to become particularly popular (as of yet). But distinguishing Inter- from IntraPersonal Uniqueness highlights another motivation that has been important for many authors. Feldman and White are both very concerned with cases of interpersonal disagreement—cases in which agents disagree with their peers about some important matter despite possessing the same (relevant, total) evidence with respect to it. Feldman writes about two detectives on the same criminal case, White about members of a jury. There seems to be a deep concern that if permissivism is correct some such confrontations may be ultimately unresolvable.

Academics—like other professional seekers of information and understanding—spend a great deal of time disagreeing with each other, citing evidence in an attempt to bring others along to their own point of view. Yet if permissivism is true, there may be cases in which each of two disagreeing agents will say that she's responding to the available evidence in a perfectly acceptable manner, and each agent will be

<sup>&</sup>lt;sup>14</sup>There are various traditional arguments in the Bayesian literature for diachronic consistency requirements—such as David Lewis's diachronic Dutch Book (see (Teller 1976))—but those arguments have well-known flaws.

correct. This raises the prospect of in-principle unresolvable disagreements, and may make us wonder why we put so much effort into convincing our peers.

This concern is related to a long-standing worry about Subjective Bayesianism. Philosophers of science have worried that if Subjective Bayesianism is correct—if rational scientific inquirers appraise experimental results according to their own subjective evidential standards—we will be hard-pressed to account for consensus among working scientists about which experimental results support which hypotheses. Moreover, when disagreements arise as to the proper interpretation of results, no resolution may be available, as each party may be assessing the data rationally. Subjective Bayesianism (and permissivism in general) seems to undermine a desirable objectivity in science.

When authors worry about consensus in science (and in reasoning more generally), it's often unclear which of a number of issues they are worrying about. First, they may be concerned to explain either descriptive or normative facts. Under the former heading, one wonders how to explain existing consensus in science about which theories are best supported by extant evidence. Unless scientists are by-and-large competently tracking an evidential support relation constant for all of them, there seems no way to explain the large amount of scientific agreement we observe. Notice that we can draw a further distinction here about precisely what data is to be explained. Are we meant to explain the fact that different groups of scientists, after inter-group consultation, come to agree on which hypotheses are supported? Or must we explain the fact that different groups of scientists, without consulting, independently favor the same hypotheses on the basis of similar bodies of evidence? Call these phenomena "descriptive agreement after consultation" and "descriptive agreement in isolation".

An immediate response to these descriptive concerns is to deny that consensus is all that common among working scientists (thereby denying the putative phenomena to be explained). If there is objectivity to science, it is revealed not by actual scientists' opinions, but instead by our presumption that they would reach consensus under ideal conditions. This is a normative consensus concern—the notion that inquirers should draw the same conclusions from the same bodies of evidence. For instance, the great Subjective Bayesian L.J. Savage writes of his opponents,

It is often argued by holders of necessary and objectivistic views alike that that ill-defined activity known as science or scientific method consists largely, if not exclusively, in finding out what is probably true, by criteria on which all reasonable men agree. The theory of probability relevant to science, they therefore argue, ought to be a codification of universally acceptable criteria. Holders of necessary views say that, just as there is no room for dispute as to whether one proposition is logically implied by others, there can be no dispute as to the extent to which one proposition is partially

<sup>&</sup>lt;sup>15</sup>cf. (Williams 1986, Ch. 8) and (Wright 1992).

<sup>&</sup>lt;sup>16</sup>In the preface to his (1972), Bruno de Finetti wrote of the recently-deceased Savage that "it was clear how much was yet to be expected from his clarifying spirit for the success in our task: to relieve science and mankind from the strange superstitious prejudice that the obvious subjective probability feelings could or should be related to, or even replaced by, some hypothetical notion that, in some indefinable sense, could be called objective." (p. vi)

implied by others that are thought of as evidence bearing on it. (Savage 1954, p. 67)

Again, we can distinguish a norm that inquirers should agree in isolation from a norm that they should agree after mutual consultation. Later in this essay we will demonstrate how consensus after consultation (both descriptive and normative) can be achieved on a permissivist position. That leaves the concern for normative consensus in isolation. But the demand that rational agents separately draw the same conclusions from the same body of total evidence is just a restatement of (Inter)Personal Uniqueness. So there is no *independent* motivation for Uniqueness here.

Perhaps independent motivation can be found in another thread of the literature relating Bayesianism, objectivity, and science (often under the heading "the Problem of the Priors"). Notice that Personal Uniqueness is equivalent<sup>17</sup> to:

Strong Evidential Supervenience: The doxastic attitudes of all rational agents supervene on their total evidence—there can be no difference between two rational agents' doxastic attitudes without a difference in their evidence.

Strong Evidential Supervenience embodies a strong form of evidentialism, <sup>18</sup> according to which a rational agent's beliefs must be *driven* by her total evidence—not only should her doxastic attitudes be *consistent* with that evidence; they may not go *beyond* it in any way. (If permissivism held and an agent's body of evidence could make conflicting beliefs rationally permissible, then whatever grounded the agent's decision between those beliefs would have to go beyond that evidence.) Under Strong Evidential Supervenience, an agent's evidence fully determines what it's permissible for her to believe, and a belief is permitted only when it's required. The position is reminiscent of Clifford's principle that "it is wrong always, everywhere, and for anyone, to believe anything upon insufficient evidence." (Clifford 1879)

It is often suggested that for scientific opinion to be legitimate, it must be grounded entirely in cold, hard evidence. Strong Evidential Supervenience becomes a condition for the objectivity of science. Howson and Ubrach write,

The prior distribution from which a Bayesian analysis proceeds reflects a person's beliefs before the experimental results are known. Those beliefs are subjective, in the sense that they are shaped in part by elusive, idiosyncratic influences, so they are likely to vary from person to person. The subjectivity of the premises might suggest that the conclusion of a Bayesian induction is similarly idiosyncratic, subjective and variable, which would conflict with a striking feature of science, namely, its substantially objective character. (Howson and Urbach 2006, p. 237)

Elliott Sober criticizes Subjective Bayesianism as follows:

It is important to recognize how important it is for prior probabilities to be grounded in evidence. We often calculate probabilities

 $<sup>^{17}</sup>$ Keeping in mind that for simplicity's sake we're assuming opinionated agents who adopt exactly one doxastic attitude towards each proposition.

<sup>&</sup>lt;sup>18</sup>(Kelly 2008) and (Ballantyne and Coffman 2012) each discuss connections between Uniqueness and evidentialism, but the forms of evidentialism they discuss are weaker than Strong Evidential Supervenience. A position like Strong Evidential Supervenience is mentioned briefly in (Ballantyne and Coffman 2011).

to resolve our own uncertainty or to persuade others with whom we disagree. It is not good assigning prior probabilities simply by asking that they reflect how certain we feel that this or that proposition is true. Rather, we need to be able to cite reasons for our degrees of belief. Frequency data are not the only source of such reasons, but they are one very important source. The other source is an empirically well-grounded theory. (Sober 2008, p. 26)

Justified belief must be based on the right kinds of grounds—not something illegitimate or idiosyncratic. Uniqueness (in the guise of Strong Evidential Supervenience) may be motivated by the thought that only *evidence* provides such appropriate, objective grounds.

Feldman does not explicitly commit to Strong Evidential Supervenience in his (2007) piece on Uniqueness. But Feldman clearly has a strong commitment to evidentialism. He and Earl Conee literally wrote the book on that view, the introduction to which says, "Evidentialism is a view about the conditions under which a person is epistemically justified in having some doxastic attitude toward a proposition. It holds that this sort of epistemic fact is determined entirely by the person's evidence." (Conee and Feldman 2004, p. 1, emphasis added) This certainly sounds like a commitment to Strong Evidential Supervenience.

Feldman also offers a general challenge to permissivists in his Uniqueness piece. When confronted by the suggestion that rational agents with the same evidence might disagree because they have different evidential standards (what Feldman calls "starting points"), he writes,

Once people have engaged in a full discussion of issues, their different starting points will be apparent. And then those claims will themselves be open for discussion and evaluation. These different starting points help to support the existence of reasonable disagreements only if each side can reasonably maintain its starting point after they have been brought out into the open.... Once you see that there are these alternative starting points, you need a reason to prefer one over the other. (Feldman 2007, p. 206)

It's interesting that Feldman poses this as a challenge about agreement after consultation ("Once people have engaged in a full discussion..."). Presumably, though, a more general point is being dramatized by the dialectical staging. If Uniqueness is true, exactly one evidential standard is rationally correct, so there is no choice among evidential standards for a rational agent to make. But if multiple standards are permissible it seems an agent must maintain the standard she does for some reason—the kind of reason she could cite in a confrontation with individuals advocating different standards.<sup>19</sup>

The permissivist may respond to Strong Evidential Supervenience—and Feldman's challenge about the grounds for agents' standards—in two ways. On the one hand, the permissivist might claim that rational individuals do have reasons for their differing evidential standards, but those reasons are non-evidential. (This

<sup>&</sup>lt;sup>19</sup>By using words like "choice" and "maintain" we don't mean to suggest anything voluntaristic—an agent need not have *chosen* to adopt or maintain her evidential standards at any particular point. An agent may possess a particular attribute (such as a moral code) for which she has reasons and for which she is justified despite never having explicitly chosen to adopt it.

denies another typical evidentialist position: that the only reasons which may legitimately influence beliefs are evidence.) Non-evidential reasons might include the agent's goals, or various a priori considerations (depending on whether one reads the a priori evidentially). On the other hand, the permissivist might grant that all reasons for belief are evidential, but deny that a rational agent needs reasons for espousing one set of evidential standards over another. On this line, an agent's evidential standards constitute the point of view from which she evaluates reasons and evidence. That point of view cannot have—and does not need—evidential support.<sup>20</sup>

### 3. Epistemically Irrelevant Causal Factors

Up to this point we have considered two potential arguments for the Uniqueness Thesis (the rejection of crazy inferences and White's irrationality of arbitrary switching) and dismissed them both. We have also seen a number of more amorphous motivations for Uniqueness, which we might label *Diachronic Rationality Constraints Require Uniqueness*, Consensus Requires Uniqueness, and Objective Grounding Requires Uniqueness. We will now examine further explicit arguments for the thesis; as we do so, more underlying motivations will emerge as well.

White offers the following example:

To make the situation more vivid, let's fill in the details with a make-believe story about how we come to adhere to certain epistemic standards. Suppose it is just a matter of education. I follow standards S because I was inculcated with them at MIT. But had I attended Berkeley, I would have been inculcated with standards S' instead. Given my total evidence as input, S and S' deliver the conclusions P, and  $\sim P$  respectively. (The story may be far-fetched, but nothing hinges on the details. And if my being rational is compatible with adopting either set of standards, then there is some further factor which led me to hold S rather than S'.) Now I can imagine myself in a counterfactual situation before graduate school where my sole motive for study is to answer the question whether P. I have all the available relevant evidence, I'm just not sure vet what to make of it. Now I learn that if I attend MIT I will inevitably inherit standards S from my mentors, which given the evidence will lead me to believe P. Attending Berkeley will result in my adhering to standards S' and hence arriving at the conclusion  $\sim P$ . Now surely the prospect of several years of graduate school will seem rather pointless no matter how passionately curious I am as to whether P. Indeed my prospects for answering whether P to my satisfaction should seem dim. I might as well choose a grad school to attend and hence opinions to hold by a preference for Massachusetts weather, or by flipping a coin. Once I have filled out the enrollment form for MIT say, I will know that unless something gets in the way, in a few years I will be of the opinion that P. If I am a permissivist, I should take it that I will soon rationally believe P. If this is so, why shouldn't I just believe it now and save myself

<sup>&</sup>lt;sup>20</sup>Compare (Schoenfield 2014, §2.2).

the time and trouble? But of course it would be absurd to form an opinion on the matter by an arbitrary choice when I don't even know what to make of the evidence. If this is the sorry state I find myself in with respect to answering whether P before I begin my inquiry, then I should judge myself no better off having arrived at a conclusion, if I judge that my adoption of epistemic standards was such an arbitrary matter. (White 2005, p. 452)

White may be wrong in suggesting this case is far-fetched; G.A. Cohen (2000) tells a very similar story about how philosophers of his generation formed their beliefs concerning the analytic/synthetic distinction depending on whether they attended Harvard or Oxford. More to the point, White is wrong about what the permissivist must say about his case.

To be very careful about the structure of White's example, let's suppose there are three students involved. One, named "Roger", is a graduate student at MIT. Another, named "Mike", is a graduate student at Berkeley. Both are investigating the same philosophical proposition P, and miraculously both have the same evidence with respect to P, which we will call E. Yet given the different educations they have received, Roger has standards S and Mike has standards S'. According to S evidence E supports P, while according to S' the same evidence supports  $\sim P$ . Importantly, Roger and Mike are each operating in isolation—neither is aware that at the other university standards are being inculcated on which E supports exactly the opposite judgment with respect to P. (Facts about what goes on at the two universities are not a part of E.)

Yet our third student, Susanna, is very aware of the situation. Susanna's evidence (which we'll call E') contains not only E, but also the facts about what the standards taught at MIT and Berkeley would lead one to conclude about P on the basis of E. She does not yet know what to make of P given E, and is trying to choose a graduate school to attend. White argues that someone in Susanna's position should see neither set of standards as preferable, and so should suspend judgment with respect to P. (Moreover, there's the strong suggestion that even once Susanna chooses a grad school and learns the evidential standards it has to offer, she still should suspend on P.) But even if we were to grant White this (admittedly intuitive) position, it wouldn't rule out permissivism.

White defines a "permissive case" as one in which an agent's evidence rationally permits differing conclusions about the same proposition. A permissivist need not think that every case is permissive. So a permissivist might be willing to grant that Susanna's case is not permissive with respect to P, while still maintaining that Roger and Mike are in permissive cases. Roger and Mike have evidence E with respect to P. Susanna has evidence E', which outstrips E. Since Roger and Mike have different evidence than Susanna does with respect to P, maintaining that Roger and Mike's evidential situation with respect to P is permissive does not require one to maintain that Susanna's situation is permissive with respect to P. A permissivist could maintain that Roger is rational in believing P, Mike is rational in disbelieving P, and Susanna should suspend judgment.

White's example is meant to indicate a general *reductio* against any position on which *any* permissive cases are possible. (To establish Uniqueness, all such cases must be ruled out.) Whenever a permissivist thinks it's rational for two agents (represented by Roger and Mike in the example) to draw different conclusions from

the same evidence, it's going to be possible to introduce a third agent (Susanna) who sees this situation coming. Intuitively that third agent is required to suspend judgment about the relevant proposition, but White thinks anyone who's a permissivist about the original two agents has to be a permissivist about the third as well. Our point is that one can maintain virtually any position one wants about the third agent while remaining a permissivist about the original two.

This is important because different permissivists will view Susanna (the third agent) in different ways. The Extreme Subjective Bayesian, for instance, takes every case to be permissive unless the agent's evidence deductively entails or refutes the hypothesis in question. So an Extreme Subjective Bayesian will want to explain away our intuitions about Susanna. Perhaps our intuitions are tracking the fact that suspending judgment would be *typical* of the kinds of agents with which we tend to associate, even though strictly speaking that reaction isn't rationally *required*. (White is making the common mistake of mistaking the intersubjective for the objective.) But less extreme Subjective Bayesians—and less extreme permissivists in general—may be willing to grant that Susanna should suspend judgment.

If White is correct about what Susanna should do, there's another reading available of what his example establishes. (We will flag this reading now, then set it aside until the next section.) In arguing for Uniqueness, White aims to establish that there are no permissive cases. Ballantyne and Coffman (2012, p. 663) distinguish merely permissive cases from what we'll call acknowledged permissive cases. An acknowledged permissive case is one in which an agent is not only in a permissive case, but also realizes that her case is permissive. The relevant difference between E and E' seems to be that Susanna is aware of the evidential standards interpreting E in opposite directions with respect to P, while Roger and Mike are not. If Roger or Mike knew he was in a permissive situation, he would be in the same boat as Susanna, which might affect how many attitudes toward P were permissible on his total evidence. The permissiveness of Roger and Mike's cases seems to rely on their lack of awareness of that permissiveness. So one might maintain that while White has not refuted the existence of P permissive cases, he has refuted the possibility of P acknowledged P permissive cases.

We'll come back to this suggestion in Section 4. For the time being White's case is at best inconclusive as an argument against permissivism. It does, however, bring out another motivation for Uniqueness. Even if we focus just on Roger and Mike—the two agents the permissivist definitely wants to be permissive about—it's worrisome to think that their differing respective stances on P might both be rationally permissible. Roger believes P and Mike believes P because of an epistemically arbitrary factor: the place they went to graduate school. Supposing Roger made the foolhardy decision to attend MIT because he prefers Boston

 $<sup>^{21}</sup>$ See also (Cohen 2013, p. 101).

 $<sup>^{22}</sup>$ Elga (ms) suggests (about an analogous case) that if Roger or Mike learned of the evidential standards being taught at the other institution (and so came to possess evidence E') after being inculcated with the standards of his own institution, it would still be rational for him to stick with his committed attitude toward P. It's unclear whether Elga thinks this position applies to Susanna, who learns of the conflicting evidential standards before being exposed to one of them. So it's unclear whether Elga thinks that Roger or Mike's coming to possess E' down the road would put them in the exact same boat as Susanna.

<sup>&</sup>lt;sup>23</sup>White discusses this line at his (2005, p. 450). Ballantyne and Coffman (2012, §§3–4) argue against a permissivist position on which the only permissive cases are unacknowledged ones.

weather, his weather preferences will have (indirectly at least) influenced his beliefs about proposition P. Rational agents shouldn't let their weather predilections influence their beliefs. <sup>24</sup> Yet if one assigns beliefs according to one's personal evidential standards, and conflicting evidential standards are rationally permissible, then it seems inevitable this sort of influence will occur.

We should carefully distinguish this motivation from the evidentialist concern that ended the previous section. There the evidentialist was concerned that if permissivism was true, nothing legitimate could ground, or justify, a rational agent's adhering to one set of evidential standards rather than another. The concern now is a causal one: that permissivism will allow epistemically arbitrary factors to causally influence a rational agent's beliefs.<sup>25</sup>

The trouble with this objection to permissivism is that even if Uniqueness is true, epistemically arbitrary factors causally influence a rational agent's beliefs. According to Uniqueness a rational agent's beliefs supervene on her evidence. But epistemically arbitrary factors can cause an agent to have one body of evidence rather than another. Consider the following example:

Miriam is trying to decide whether to attend Church State or Athe-U for college. Miriam currently has fixed (rational) evidential standards, but no opinion about whether the theory of evolution is true. She knows that students who share her evidential standards and attend Athe-U are presented with a great deal of (true) evidence that (rationally) convinces them to believe in evolution. Students who share her evidential standards and attend Church State are presented with a great deal of (true) evidence that (rationally) convinces them to disbelieve the theory of evolution. The most important thing about choosing a school for Miriam is figuring out whether the theory of evolution is true.

Surely a situation like this is possible; by carefully selecting what (true) information to present, one can build a rationally convincing case on either side of the evolution debate. This kind of example should also be plausible for defenders of both Uniqueness and permissivism. It seems clear to us that for any student who shares Miriam's standards and attends one university without knowing about the other, the evidence presented to him there should convince him of the relevant view. This is consistent with the position that Miriam, being aware of the evidence available in each location, should suspend judgment about evolution whichever university she attends (on the basis of an "evidence of evidence is evidence" principle (Feldman 2007)).

This example looks perfectly analogous to White's graduate school example. White's example is supposed to suggest that if multiple permissible evidential standards are available, then we should be worried that the beliefs formed by Roger and Mike (who aren't aware of what goes on at the university they don't attend) are influenced by the epistemically irrelevant historical contingencies that causally determined which standards they possess. In the evolution example, the beliefs formed by students at each university who aren't aware of what goes on at the other are influenced by the epistemically irrelevant historical contingencies that

<sup>&</sup>lt;sup>24</sup>Unless we're discussing beliefs about their own weather preferences!

 $<sup>^{25}</sup>$ (White 2010), (Elga ms), and (Schechter ms) all discuss the significance of agents' evidential standards' being causally influenced by epistemically arbitrary factors.

causally determined which body of evidence they receive. Yet no one sees this as a challenge to the view that rationality requires beliefs to be responsive to evidence.

White certainly isn't concerned about the chance events by which we come to have particular packages of evidence:

If I hadn't studied philosophy I would not believe that Hume was born in 1711. I would, if not disbelieve it, give little credence to that particular year being his birth date. And in fact I just learnt this fact by randomly flipping open one of many books on my shelf and reading where my finger landed. I was lucky indeed to be right on this matter! Of course there is nothing unsettling about this. There is nothing problematic about being lucky in obtaining evidence for one's belief. (White 2010, p. 597, emphasis in original)

And yet White is *very* concerned about the epistemically arbitrary events by which agents would come to have one evidential standard rather than another if permissivism were true. Why the asymmetry?

We can develop a proposal for how White sees the asymmetry by noting a point he makes repeatedly in a number of his writings. Here it's important to understand that White believes in following one's evidence for a very different reason than Feldman does. In their co-authored work on evidentialism, Conee and Feldman write of their evidentialist thesis EJ, "We do not offer EJ as an analysis. Rather it serves to indicate the kind of notion of justification that we take to be characteristically epistemic—a notion that makes justification turn entirely on evidence.... We believe that EJ identifies the basic concept of epistemic justification." (2004, pp. 83–84) At least when it comes to epistemic justification, Feldman takes the link between justification and evidence to hold on something like a conceptual level.

White, on the other hand, holds evidence significant for rationality and justification because of a particular feature evidence possesses: truth-conduciveness. White writes, "In inquiry my first concern is to arrive at a true conclusion regarding the defendant's guilt. And it is not clear why I should be so concerned with having my beliefs appropriately based unless this is conducive to the goal of getting things right." (2014, p. 316, emphasis in original) To remain neutral among various positions about what's epistemically important, we have been using the term "epistemically arbitrary" without precisely defining it. <sup>26</sup> But it's fairly clear that for White the causal processes in question are objectionably "arbitrary" in the sense that they have no tendency to pick out from among the standards available those that are more truth-conducive. While many epistemologists do not share White's view of truth as the primary goal of belief, we will grant it arguendo to see where it leads. <sup>27</sup>

In that (2014) article White writes, "If there is evidence available strongly supporting one verdict, then it is highly probable that it supports the correct verdict" (p. 315); "In a non-permissive case where the evidence directs us to a particular

<sup>&</sup>lt;sup>26</sup>Notice that if "epistemically arbitrary" meant "arbitrary with respect to the evidence", the motivation for Uniqueness under consideration would be question-begging. The current question is whether it's rationally problematic for epistemically arbitrary factors to influence belief. If that were just the question whether it's rationally permissible for non-evidential factors to influence belief, answering it would simply be re-asserting one's position on Uniqueness.

 $<sup>^{27}</sup>$ For a different response to White's truth-conduciveness concerns about permissivism, see (Meacham 2014, §5.3).

conclusion, following the evidence is a reliable means of pursuing the truth" (ibid.); and "Common wisdom has it that examining the evidence and forming rational beliefs on the basis of this evidence is a good means, indeed the best means, to forming true beliefs and avoiding error." (p. 322) We could sum up these sentiments with the slogan "Most evidence isn't misleading." On the other hand, "In a permissive case... if either conclusion can be rationally held it would be natural to expect around a 50-50 split of opinions. In this case only about half of the inquirers will be correct in their conclusions." (p. 315) (This is why White repeatedly suggests that when one finds oneself in a permissive case, choosing according to one of the rationally permitted standards is no more likely to get you to a true belief than flipping a coin.) So perhaps there is a disanalogy between the graduate school case and our evolution example: It's not distressing that an agent's particular batch of evidence was selected for her on the basis of arbitrary factors, because most batches of evidence rationally lead us to the truth. It is, however, distressing that if permissivism is true an agent's evidential standards were selected for her on the basis of arbitrary factors, because that means she's got no better chance of reaching the truth by enacting those standards than if she had flipped a coin.<sup>28</sup>

Epistemologists often say—both in print and in conversation—that most evidence isn't misleading.<sup>29</sup> It is unclear to us not only why one should believe this slogan, but even what it is supposed to *mean*.

Start with the fact that for a permissivist, there will in many cases be no such thing as what a body of evidence supports on its own, so *a fortiori* there will be no facts about whether what the evidence supports is true. In a permissive case it's the pairing of a body of evidence and an evidential standard that indicates conclusions, and it's that pairing which can be assessed for accuracy.

But let's see if we can support the slogan from a Uniqueness point of view, on which there are always facts about what conclusions a body of evidence supports on its own. The next question to ask is whether we suppose evidence is factive. If the point of asserting that most evidence isn't misleading is to advise an agent seeking truth to base her beliefs on rational conclusions from what she *takes* to be her evidence, then it's unclear whether we can assume all evidence is factive. After all, in evaluating that advice we might want to take into account that most of the agents applying it will be doing so on the basis of bodies of (what they take to be) evidence that include falsehoods.

Nevertheless, let's further grant the factivity of evidence so as to make the best case for the slogan we can. If evidence is factive, then at least evidence that *entails* a conclusion isn't misleading with respect to that conclusion. (Anything entailed

<sup>&</sup>lt;sup>28</sup>Like White, Schechter (ms, p. 7) seems to assume that if an agent's evidential standards were selected in an arbitrary fashion, that agent is unlikely to have reliable standards. Schoenfield (2014)—who argues for permissivism!—nevertheless concedes to White that permissivism will undermine the truth-conduciveness of evidential standards in the mind of anyone who doesn't already subscribe to one of those standards. In a similar vein, Dogramaci and Horowitz (ta) write, "under permissivism...rational reasoners cannot be ensured to be as reliable as they can be if uniqueness is true."

 $<sup>^{29}</sup>$ Just to select an example that happens to appear in the same volume as White's later Uniqueness piece (and with no intention to pick on this author in particular), Comesaña (2014, p. 240) baldly asserts, "If everything tells in favor of H is true, then most likely H is true" (where "everything" refers to an agent's total evidence).

by a truth is true!) Yet if White's goal in endorsing the slogan is to make evidence-following on a Uniqueness regime look more reliable than applying one's standards on a permissive view, entailing evidence isn't going to help him make that case. Any plausible permissivist view will require every rationally permissible evidential standard to get the deductive cases right. (For example, every hypothetical prior permitted by Extreme Subjective Bayesianism handles those cases correctly.)

So now imagine Uniqueness is true, grant the factivity of evidence, and focus on non-deductive cases. What would we be asserting if we said that in most of those cases evidence is not misleading, and how might we support such a claim? First, the slogan involves a "most" claim, but suggests no particular measure over the infinite number of potential non-deductive evidential situations. Second, even once we've granted Uniqueness, any claim that evidence is non-misleading must still be relative—relative to the hypothesis we're wondering whether that evidence is misleading about. A given agent's body of total (factive) evidence is probably misleading with respect to some hypotheses and non-misleading with respect to others.<sup>30</sup>

The slogan defender must therefore hold that for most non-entailing evidence/hypothesis pairs, the evidence supports the truth about that hypothesis. Presumably to avoid worries about counting the infinite space of such pairs, the sloganeer will back off to some claim about bodies of evidence actually possessed by real humans and hypotheses actually entertained by them. But even within this limited domain our evidence is often misleading in a systematic and widespread fashion. It's very plausible that, even when interpreted in perfectly rational fashion, humankind's total evidence with respect to the physical behavior and constitution of the microworld was hugely misleading up until the very recent past. (And it's probably the case that the bodies of evidence possessed by the majority of living humans are still misleading with respect to that domain.)

The best position for the defender of the slogan that most evidence isn't misleading is to maintain that with respect to everyday, useful hypotheses that come up in the ordinary course of life, most people possess bodies of evidence that generally aren't misleading. This fact helps explain why we tend to have true beliefs in that domain and are able to navigate the world as successfully as we do.

The trouble is, the permissivist can give a similar defense of the claim that with respect to everyday, useful hypotheses that come up in the ordinary course of life, most people possess evidential standards that (when applied to the bodies of total evidence they tend to have) generate beliefs which tend to be true. Not only is this claim explanatory in its own right; it may also be explainable by natural and cultural selection. These days whole areas of cognitive science tease out how humans are wired to process bodies of evidence they typically receive and explain why such

<sup>&</sup>lt;sup>30</sup>Put in terms of Attitudinal Uniqueness, we are assuming that a body of evidence is misleading with respect to a *false* hypothesis when it justifies believing that hypothesis and misleading with respect to a *true* hypothesis when it justifies *dis*believing that hypothesis. When we consider degrees of belief instead, the question of whether evidence is misleading for a hypothesis is a question about the *accuracy* of the credences that evidence yields. There is a large literature on measuring the accuracy of credences, but the general idea is that accuracy requires assigning high credence to truths and low credence to falsehoods. (See (Pettigrew 2011, §6).) What about suspension of judgment—when evidence justifies suspending judgment on a hypothesis, is it misleading with respect to that hypothesis? (After all, the hypothesis itself is either true or false.) For a proposal on scoring the accuracy of suspensions of judgment, see (Easwaran ta).

coded heuristics might have helped us get things right in the environments in which we evolved. For instance, Bayesian vision scientists hypothesize that the human visual system employs "priors" which process retinal stimuli on the assumption that lighting sources come from above.<sup>31</sup> This tends to be a fairly reliable assumption, and it's obvious why we might have evolved to make it.

In maintaining that typical evidential standards are typically reliable,<sup>32</sup> the permissivist need not think that one unique evidential standard is the *most* reliable (relative to typical bodies of evidence and typical hypotheses) and therefore rationally singled out. It's very plausible to maintain (especially given the counting difficulties involved) that a number of rational standards do roughly equally-well across typical evidence and hypothesis pairings, with some standards doing better on some occasions and some standards doing better on others.<sup>33</sup>

We began this discussion because White wanted to treat arbitrary-standards and arbitrary-evidence cases asymmetrically. Arbitrary evidence was not worrying because most evidence points toward the truth, so even if your evidence is selected arbitrarily you're likely to get accurate results. On the other hand, White suggested that if multiple standards are rationally permissible "only about half of the inquirers will be correct in their conclusions." Yet to the extent we can make sense of the claim that most evidence isn't misleading, it looks equally plausible to say that most standards aren't misleading. And if epistemically arbitrary factors are selecting evidential standards for you from a set most of whose members are reliable, the fact that your standards were arbitrarily selected from that set is no reason to question their reliability.

One might ask whether an agent has to know that most of the standards in a set are reliable before it can be rational for her to employ a standard arbitrarily

 $<sup>^{31}\</sup>mathrm{For}$  citations see (Adams, Graf, and Ernst 2004). (Thanks to Farid Masrour for help with this reference.)

 $<sup>^{32}</sup>$ In fact, the permissivist need only maintain that typical rationally-permissible evidential standards are typically reliable. For highly permissive permissivists like Extreme Subjective Bayesians, adding this "rationally-permissible" rider will only slightly narrow the set of evidential standards in question. But for a more restrictive permissivist the effects of this rider may be significant.

<sup>&</sup>lt;sup>33</sup>We mention here only to reject as irrelevant the "existence" in some sense of an evidential standard that is guaranteed to have the highest reliability possible. Consider a hypothetical prior that, relative to any factive body of evidence, assigns credence 1 to every proposition that's true in the actual world, and credence 0 to every proposition that's actually false. While the evidential standard represented by this prior is more accurate than the standards non-omniscient agents will typically adopt, this doesn't call into question the rational permissibility of those typical standards.

<sup>&</sup>lt;sup>34</sup>We've been treating the slogan that most evidence isn't misleading as asserting a contingent, empirical truth. There are, however, views of evidence/rationality/justification on which the slogan could be defended on *a priori* grounds. For instance, on a reliabilist view of justification a method of assessing evidence and forming beliefs will count as justification-conferring just in case it tends to produce true beliefs (in most hypotheses? relative to most bodies of evidence?). This may guarantee that most beliefs justified on the basis of evidence are true. Yet it's perfectly possible on such a view that more than one evidence-assessment method may be reliable, so that the multiple evidential standards accepted as rational by the permissivist all count as justification-conferring.

For our purposes we need not delve deeply into other views that would guarantee the non-misleadingness of evidence *a priori*, such as some semantic responses to skepticism (e.g. (Putnam 1981) and (Chalmers 2007, esp. §7)). Suffice it to say that if these approaches provide arguments for the slogan that most evidence isn't misleading, they will also provide arguments for the position that most rationally-permissible evidential standards aren't misleading either.

selected from that set.<sup>35</sup> More to the point: We made some (largely armchair) speculations about the reliability of standards possessed by most human beings, but don't agents need more extensive evidence for the reliability of their standards before it's rational to rely on those standards? Yet this is a standard question in epistemology—need one *know* a method is reliable before it can yield justified beliefs?—to which there are now many standard answers. Perhaps it's enough for the standards just to *be* predominantly reliable, even if the agent who employs them cannot establish that fact. Or perhaps agents possess default warrant to believe their standards are reliable absent any concrete evidence to the contrary (compare (Wright 2004)). Notice that if we follow this line, learning that one's standards were selected by an epistemically arbitrary causal factor need not supply a defeater for the claim that one's standards are reliable; a true defeater would also have to establish that the set selected from was not predominantly reliable.<sup>36</sup>

### 4. The Reasoning Room

Here's a simple case in which it seems reasonable to say that most of the evidential standards involved aren't misleading:

You are standing in a room with nine other people. Over time the group will be given a sequence of hypotheses to evaluate. Each person in the room currently possesses the same total evidence relevant to those hypotheses. But each person has different ways of reasoning about that evidence (and therefore different evidential standards).

When you are given a hypothesis, you will reason about it in light of your evidence, and your reasoning will suggest either that the evidence supports belief in the hypothesis, or that the evidence supports belief in its negation. Each other person in the room will also engage in reasoning that will yield exactly one of these two results.

This group has a well-established track record, and its judgments always fall in a very particular pattern: For each hypothesis, 9 people reach the same conclusion about which belief the evidence supports, while the remaining person concludes the opposite. Moreover, the majority opinion is always accurate, in the sense that whatever belief the majority takes to be supported always turns out to be true.

Despite this precise coordination, it's unpredictable who will be the odd person out for any given hypothesis. The identity of the outlier jumps around the room, so that in the long run each agent is odd-person-out exactly 10% of the time. This means that each person in the room takes the evidence to support a belief that turns out to be true 90% of the time.

<sup>&</sup>lt;sup>35</sup>cf. White's discussion of "sticky pills" at (2005, p. 449).

<sup>&</sup>lt;sup>36</sup>One might wonder why a permissivist (especially an Extreme Subjective Bayesian) would be willing to grant that *every* rational agent should count the proposition that her evidential standards are unreliable as a defeater for those standards. For a derivation of that conclusion from extremely minimal constraints on rationality, see (Egan and Elga 2005).

Clearly this example is artificial in its regimentation. But it's a cleaned-up version of a phenomenon that happens all the time. Each of us in the world evaluates our evidence about that world in a slightly different manner, though most of us do so in a way that tends to be reliable. Or to take a more rarefied example: The various groups that take part in climate forecasting for the International Panel on Climate Change (IPCC) have roughly the same total evidence about the future course of terrestrial weather patterns. Each of those groups assesses that evidence differently to offer predictive results, and it isn't that far-fetched that each group will have roughly the same reliability score in the long run. This doesn't keep them from disagreeing on particular predictions.

We submit that in the Reasoning Room example above, it is rationally permissible for you to form the belief that your reasoning says is supported by the evidence. The same goes for each other agent in the room. And since at least one of those agents disagrees with you on what belief the evidence supports, this means that at least one agent is rationally permitted to adopt a belief that disagrees with yours. So we are interpreting this example as a permissive case. (Later we'll discuss how Uniqueness defenders might re-interpret the example.)

Assuming our interpretation is correct, the Reasoning Room shows that even when you and another agent have reached differing, rationally-permissible conclusions about a particular hypothesis from the same evidence, it's possible that each of you is employing evidential standards that are truth-conducive in the long run. (Perhaps each of your standards was arbitrarily selected from a pool of generally-reliable options....) More generally, the Reasoning Room demonstrates how permissivism can avoid a number of undesirable consequences opponents often attribute to the view.

White, for instance, writes at one point,

Supposing [permissivism] is so, is there any advantage, from the point of view of pursuing the truth, in carefully weighing the evidence to draw a conclusion, rather than just taking a belief-inducing pill? Surely I have no better chance of forming a true belief either way. If [permissivism] is correct carefully weighing the evidence in an impeccably rational manner will not determine what I end up believing; for by hypothesis, the evidence does not determine a unique rational conclusion. So whatever I do end up believing upon rational deliberation will depend, if not on blind chance, on some arbitrary factor having no bearing on the matter in question. (White 2005, p. 448)

If you behave in Reasoning Room the way we have described, which belief you adopt may depend on an arbitrary factor with no bearing on the matter in question. Nine of you in the room will adopt one belief while the last adopts the opposite; all of you were assessing the same evidence; whatever made you go your way and at least one other person go the other was not a function of the evidence. It's also true that in this example the evidence does not determine a unique rational conclusion (because at least two rational people in the room reached opposite conclusions from that evidence). Yet it doesn't follow that weighing the evidence in a rational manner has not determined what you ended up believing. After all, if you had made a rational mistake and misapplied your standards to that same evidence, you would've wound up believing something else. And it *certainly* does not follow that

there is no advantage "from the point of view of pursuing the truth" to weighing the evidence over randomly taking a belief-inducing pill. Weighing the evidence according to your standards gives you a 90% chance of believing the truth, while taking a belief-inducing pill would give you only a 50% chance.

White's comparing reasoning in a permissive case to pill-popping is another way for him to suggest that any epistemically arbitrary choice among rival evidential standards must leave the agent with a low probability of accurate belief. But we suggested earlier that evolutionary and perhaps cultural forces may have winnowed the available standards to a generally reliable set, at least for the bodies of evidence and hypotheses humans entertain most often. An arbitrary or chancy selection among a number of options, most of which are reliable, will leave us with a high probability of believing truths. In the Reasoning Room, carefully weighing the evidence after arbitrarily selecting one of the available evidential standards would leave you no better off with respect to the truth than popping a pill that gave you a 90% chance of accurate belief. If truth-conduciveness is our sole consideration, this doesn't seem a very good objection to permissivism.<sup>37</sup>

White does consider the possibility that evidential standards could be reliable without being rationally unique. He writes:

It might be suggested that rationally evaluating the evidence is a fairly reliable means of coming to the correct conclusion as to whether P, even if that evidence does not determine that a particular conclusion is rational. But it is very hard to see how it could....<sup>38</sup> A case—if there could be such—in which a rational person can believe P or believe  $\sim P$  instead, must be one in which the evidence favors neither conclusion.

Even if it is granted that a rational person needn't suspend judgment in such a situation, just how rational evaluation of the evidence could reliably lead us to the truth in such a case is entirely mysterious. It would have to be by virtue of some property of the evidence whose reliable link to the truth is inaccessible to the inquirer. For if an inquirer is aware that the evidence has feature F, which is reliably linked to the truth of P, then surely it would be unreasonable to believe  $\sim P$ . It is hard to imagine what such a truth-conducive feature could be, let alone how it could act on an inquirer's mind directing him to the truth. (ibid.)

As permissivists, we agree that in the reasoning room the evidence (on its own) favors neither the particular hypothesis H considered nor its negation. That's because we view the reasoning room as a permissive case, and in permissive cases evidence favors hypotheses only relative to particular evidential standards. Yet it is not mysterious in this case how rational evaluation of the evidence reliably leads the agents involved to the truth, and rational evaluation does not do so by virtue of some property whose reliable link to the truth is inaccessible to the inquirer.

 $<sup>^{37}</sup>$ Of course, we could always up the number of agents in the Reasoning Room to bring the long-run reliability score as arbitrarily close to 100% as we'd like. Upping the numbers might also make some readers more comfortable with our conclusion that it's rationally permissible for you to adopt the belief your reasoning says the evidence supports.

<sup>&</sup>lt;sup>38</sup>In one of the elided sentences White once more baldly asserts, "Evidence can be misleading—i.e. point us to the wrong conclusion—but this is not common."

Recall the IPCC groups. Each of them applies a particular analysis technique to available climate data, checking whether that data has particular features, then using those features to make a prediction. Or think about the 10 individual agents in the room. Perhaps one of them evaluates the hypothesis H by virtue of how it trades off simplicity with fit to the evidence. Or perhaps another agent leans toward H on the basis of a particular statistical significance test. As she applies that test, the relevant features of the evidence and hypothesis are obvious, and it's not mysterious how such a test could reliably point her toward the truth (even if other tests might point her in a different direction). Meanwhile the final sentence of the first White paragraph just quoted and the penultimate sentence of the second paragraph both conflate Inter- and IntraPersonal Uniqueness. We can have an example in which one rational person believes H while another believes  $\sim H$ . For one particular inquirer, focused on a particular set of features in the evidence that (reliably) point in the direction of H, it would indeed be irrational to believe  $\sim H$ . But this does not mean that another inquirer, focused on different features of the evidence, couldn't rationally endorse  $\sim H$ .

The Reasoning Room also allows the permissivist to address the distinction between permissive cases and acknowledged permissive cases. In White's graduate school example, one might think it's rationally permissible for Roger and Mike to draw different conclusions based on the same evidence because neither is aware that evidential standards exist which would point them in the opposite direction, while Susanna (who knows the results of applying the standards at each university) is forced by her knowledge to suspend judgment. Yet the Reasoning Room is not only a permissive case but also an acknowledged permissive case.<sup>39</sup> In the example it is rationally permissible to adopt the belief that your reasoning suggests is supported by the evidence. At the same time, you are absolutely certain there is at least one person in the room whose reasoning pointed her in the opposite direction. Following her reasoning is just as rationally permissible for her as following your reasoning is for you. So not only do we have two agents in the room who have rationally drawn opposite conclusions from the same evidence; each of them is aware of the existence of a person (indeed, a very nearby person!) with rational beliefs different from her own. Nevertheless, it remains rationally permissible for each agent to maintain her own opinions.<sup>40</sup>

Now something different would happen if those two people actually met and began to exchange views. Suppose your reasoning has suggested that the total evidence supports belief in H. So you form a belief in H. You then randomly select another occupant of the room, and ask her what she concluded. Suppose she tells you that on the basis of her reasoning, she believes  $\sim H$ . We submit that it would then be rational to suspend judgment as to the truth of H.

Here's an intuitive explanation why: Given what you know about the distribution of opinions in the room, you should expect before interacting with your colleague that she will agree with you about the hypothesis. Before interacting you believe H, so you believe 8/9 of the people in the room also believe H, so you expect a

 $<sup>^{39}</sup>$ Contra Cohen's (2013) "Doxastic Uniqueness" principle, and Nathaniel Sharadin's (2015) position that acknowledged permissive cases are impossible.

<sup>&</sup>lt;sup>40</sup>If we add to the Reasoning Room story that the ten evidential standards in the room were somehow arbitrarily shuffled and assigned to the agents at random, then we have a case in which being aware that your standards were arbitrarily assigned does not defeat the attitudes endorsed by those standards.

randomly selected peer to agree with you. When you find that she believes  $\sim H$  instead, this is a surprising result, which leads you to take much more seriously the possibility that you are the only H-believer in the room. So you suspend judgment on H.

For those who'd like a more precise argument, we offer a credal version of the Reasoning Room. Suppose the setup of the room is that for each hypothesis delivered, your reasoning will suggest either that the evidence supports a credence of 0.9 in the hypothesis or a credence of 0.1. You then (rationally permissibly) adopt the credence your reasoning says the evidence supports. Suppose, for instance, that you assign credence 0.9 to H. You then randomly select another occupant of the room, and find that her reasoning led her to a 0.1 credence in H. At that point, some basic Bayesian reasoning will lead you to a credence of 0.5 in H. This is the credal analog of suspending judgment.

The Reasoning Room therefore refutes Thomas Kelly's claim that if permissivism is true, there can be no reason for an agent to change her attitudes upon encountering a peer who disagrees. <sup>44</sup> Kelly argues for this claim by describing a case in which I assign a credence of 0.7 to a hypothesis on the basis of my evidence, while admitting it would be equally reasonable to assign a slightly lower credence to that hypothesis on the basis of the same evidence. You, meanwhile, assign a credence slightly lower than 0.7 to the hypothesis on the basis of that evidence, while admitting it would be equally reasonable to assign exactly 0.7. We then meet and exchange views.

Responding to the suggestion that after the exchange we should adjust our credences towards each other's, Kelly writes,

That seems wrong. After all, ex hypothesi, the opinion that I hold about [the hypothesis] is within the range of perfectly reasonable opinion, as is the opinion that you hold. Moreover, both of us have recognized this all along. Why then would we be rationally required to change? (Kelly 2010, p. 119)

$$\begin{split} \operatorname{cr}(H \mid D) = & \frac{\operatorname{cr}(D \mid H) \cdot \operatorname{cr}(H)}{\operatorname{cr}(D \mid H) \cdot \operatorname{cr}(H) + \operatorname{cr}(D \mid \sim H) \cdot \operatorname{cr}(\sim H)} \\ = & \frac{1/9 \cdot 9/10}{1/9 \cdot 9/10 + 1 \cdot 1/10} = \frac{1/10}{2/10} = \frac{1}{2} \end{split}$$

<sup>&</sup>lt;sup>41</sup>The credal case allows us to say more about why it's a good idea to adopt the attitude your reasoning says the evidence supports. In Bayesian terms, this policy has the advantage of being perfectly "calibrated" in the long-run. Moreover, if we measure accuracy by a proper scoring rule, it's the policy that maximizes long-run expected accuracy.

 $<sup>^{42}</sup>$ Let D be the proposition that a randomly-selected member of the room disagrees with your assignment. By Bayes' Theorem we have

 $<sup>^{43}</sup>$ What if you randomly select a peer who has the same credence as you in H? Learning of her credence should increase your confidence in the hypothesis above 0.9. (In fact, your credence should go all the way to 1!) This is an instance of an effect noted independently by Casey Hart and by Easwaran, Fenton-Glynn, Hitchcock, and Velasco (ms). The latter call the effect "synergy".

<sup>&</sup>lt;sup>44</sup>A similar suggestion seems to be made by Feldman at (2007, §IIIA). White (2010, n. 7) also writes, "If we really think there are [epistemically permissive] cases then even meeting an actual disagreeing peer seems to pose no challenge to one's belief." We will focus on Kelly because he goes on to provide an argument for his claim. (Thanks to (Ballantyne and Coffman 2012) for the additional citations.)

The Reasoning Room provides a straightforward answer to Kelly's rhetorical question.  $^{45}$  In the credal version of the example you initially assign one credence while being perfectly aware that at least one individual in the same room (entirely rationally) makes the diametrically opposite assignment. Upon randomly selecting an individual from the room and finding out that she made that opposite assignment, it's rational for you to split the difference between her initial credence and yours. This does not require denying that either her initial assignment or yours was rational given the evidence each of you had at that time. It merely requires admitting that in light of your new total evidence (which includes information about the attitudes of your randomly-selected peer), the chance that H is true is 1/2. This change is motivated not by finding any rational fault in one's previous attitude, but instead by coming to have evidence that makes a new attitude look more accurate, or truth-conducive.  $^{46}$ 

The Reasoning Room also refutes a claim made by Stewart Cohen, (among others<sup>47</sup>). Cohen writes,

Note that I do not need to *encounter* a peer at a different credence for there to be accuracy pressure on my credence. Simply recognizing a rational credence different from my own is enough to undermine the rationality of my credence.... In such a case, the *same* pressure exists to revise in the direction of the other credence. (Cohen 2013, p. 103, emphases added)

In the credal Reasoning Room you are certain before interacting that another rational agent assigns a different credence than your own. This exerts no pressure on you to change your credence of 0.9. Yet actually encountering that rational peer pressures you to drop your credence to 0.5. There can be a significant difference between knowing one is in a permissive case and actually uncovering a particular individual with whom one disagrees.

<sup>&</sup>lt;sup>45</sup>As Christensen (ta) notes, there are two importantly different kinds of peer disagreement cases. The peer disagreement literature often proceeds under the assumption of Uniqueness, and so assumes that when individuals with the same evidence disagree it must be because one of them has made a mistake in applying the correct evidential standards to that shared evidence. (This is why peer disagreement cases are often analyzed alongside cognitive malfunction cases.) But in permissive cases there can also be disagreement between agents who have applied their standards correctly to the same evidence, yet happen to have differing evidential standards. This is the type of case Kelly considers, and the type of case we will be discussing. (For what it's worth, Titelbaum's (2015) argument against conciliating in peer disagreement cases applies only to the other type of disagreement, in which the disagreeing parties share evidential standards.)

<sup>&</sup>lt;sup>46</sup>Ballantyne and Coffman (2012) argue against Kelly that it can make sense to split the difference upon encountering a disagreeing peer in a permissive case if neither of the parties initially realized that the case was a permissive one. The Reasoning Room establishes the stronger thesis that splitting the difference may be rational even in a case acknowledged to be permissive before the peer interaction.

Notice also that splitting the difference in the Reasoning Room doesn't involve rejecting one's old evidential standards and somehow adopting new ones. Instead, you have a constant set of evidential standards throughout the example that recommend one attitude towards H before any interaction has occurred, then a different attitude if particular evidence about that interaction comes to light. The evidential standards one applies in isolation, while yielding different results than someone else's standards in isolation, may nevertheless direct one to reach agreement with that someone after consultation.

<sup>&</sup>lt;sup>47</sup>See, for instance, (Kelly 2005, §5).

We have just seen that if our interpretation of the Reasoning Room is correct, the example accomplishes a number of important things: it refutes a number of charges made against permissivism by White and others, it establishes the possibility of acknowledged permissive cases, and it shows that conciliating in the face of peer disagreement can be compatible with permissivism. <sup>48</sup> Our interpretation assumes that the Reasoning Room is a permissive case, which runs counter to the Uniqueness Thesis. So how might a Uniqueness defender respond to the example? There are a couple of options. First, the Uniqueness theorist might agree that the ten agents in the Reasoning Room all apply different evidential standards to the same evidence. In that case (the Uniqueness theorist will say), at most one of those standards is the uniquely correct rational standard, and when the agents differ in their attitudes toward H at least one of them is irrational in doing so. While this response is available to the Uniqueness defender, it is not particularly interesting at this stage of the dialectic. The point of the Reasoning Room is to demonstrate that if one adopts a permissivist reading of the example, then various conclusions often imputed to permissivism need not follow. Simply denying permissivism as it applies to the example misses the point.

But there's a second, more interesting response available. The Uniqueness theorist might argue that the agents in the reasoning room reach different conclusions about H not because they have different evidential standards, but because they are responding to different bodies of total evidence. When you are given hypothesis H to consider, reason through your evidence, and judge that it supports belief in H, your total evidence comes to include the fact that you have reasoned from the original evidence to H. This fact is not possessed by the other agents in the room, so your total evidence differs from theirs. Most importantly, your total evidence differs from that of an agent who has reasoned from the original evidence to  $\sim H$ . (Meanwhile that agent possesses evidence you lack about the judgment rendered by her own reasoning.) Unlike the first Uniqueness defender, this Uniqueness theorist grants that the varying attitudes adopted towards H by the agents in the Reasoning Room are rationally permissible. But those differing attitudes are permissible because they are assigned relative to different bodies of total evidence. So the distinction between Uniqueness and permissivism plays no role in the Reasoning Room, and the example demonstrates nothing about the commitments of permissivism.

Again, we have to be careful about the dialectic here. The permissivist offers the Reasoning Room as a case in which the agents' differing evidential standards lead

 $<sup>^{48}</sup>$ In their (ta), Daniel Greco and Brian Hedden investigate the social role of epistemically evaluative language and conclude, "judging that someone has a rational belief about whether p involves, perhaps among other things, a commitment to deferring to that person's view about whether p." While this seems reasonable, they go on to characterize the relevant notion of deference as follows: "Deferring to someone's belief involves adopting that belief yourself." They then argue that acknowledged permissivism is incompatible with consistently deferring in this sense to other agents one recognizes as rational.

Greco and Hedden's connection between judgments of rationality and willingness to defer strikes us as plausible, but only on a weaker understanding of deference—such as incorporating the rational agent's position into one's own deliberation, or moving one's own attitudes somewhat towards the other agent's. If deference requires only conciliation (rather than full capitulation), we've just shown that acknowledged permissivism is not only compatible with Greco and Hedden's link between rationality and deference, but also permits an explanation of why one would defer even to rational agents with different evidential standards than one's own.

them to different conclusions, while the Uniqueness theorist attributes the different conclusions to differences in total evidence. Depending on one's definition of "evidence", one could squabble about whether facts concerning one's own reasoning may count as evidence. But we prefer to avoid such definitional squabbles by noting that the really important question is whether facts about one's own reasoning are part of one's relevant total evidence. Rational attitudes toward a hypothesis are influenced only by evidence relevant to that hypothesis, a relation determined by one's evidential standards. To deny that the Reasoning Room illustrates permissivist commitments, the Uniqueness theorist must establish in a manner acceptable to permissivists that all rationally-permissible evidential standards treat facts about one's own reasoning concerning a hypothesis H as evidence relevant to H.<sup>49</sup> That strikes us as a tall order.

In fact, matters are even worse for the Uniqueness defender. Because it seems to us that if one is going to take a restrictive view of what's rationally permissible in the Reasoning Room, one ought to reach the conclusion that each agent's evidence about her own reasoning is not relevant to determining her attitude toward H. To see why, let's very carefully review who has what evidence at what times in the example. Initially, before the hypothesis is provided and any reasoning is performed, everyone in the room shares a common body of total evidence we'll call E. You then receive the hypothesis H, reason about it, and judge that E supports belief in H. At that point your total evidence is E': the conjunction of E with the fact that you have judged E to support H. So her total evidence is  $E^*$ : the conjunction of E with the fact that she has judged E to support  $\sim H$ . So her total evidence is  $E^*$ : the conjunction of E with the fact that she has judged E to support E.

If Uniqueness is true, there must be a fact of the matter about whether E supports belief in H or  $\sim H$ . Let's suppose (without loss of generality) that in fact, E supports belief in  $\sim H$ . In other words, your reasoning has led you to a false judgment about what E supports. In order for the Uniqueness supporter to

 $<sup>^{49}</sup>$ Just to be crystal clear why this conclusion is required: Suppose there are at least two distinct rationally permissible evidential standards that treat facts about H-reasoning as irrelevant to H. Then we could build a Reasoning Room case in which agents with those two standards reach different conclusions about H, and the differences would not be attributable to the differences in their total evidence generated by their awareness of their own reasoning. (Perhaps the Uniqueness theorist could triumph by arguing that even if there are many permissible standards, only *one* of them treats facts about H-reasoning as irrelevant to H. But that seems an awfully implausible position.)

 $<sup>^{50}</sup>$ It's significant here that as we're envisioning the Reasoning Room scenario (in both its belief and credence versions), your initial determination about H is made entirely on the basis of first-order evidence E. The facts in the example about the track-records of the individuals involved (including yourself) are there to help you recognize that you're in a permissive case, and to drive your reaction to the discovery of a disagreeing peer. If we wanted we could purify this issue by structuring the example so that you gain the track-record information only after forming a judgment about how your first-order evidence bears on H.

<sup>&</sup>lt;sup>51</sup>One might worry that this reading assumes a great deal of introspection on your part: That whenever you judge a body of evidence to support a hypothesis, you at the same time notice that you have done so, and the fact that you have done so is added to your evidence. The Uniqueness theorist's reading of the example could be de-fanged by suggesting that this sort of introspective awareness isn't always present, and by stipulating that the Reasoning Room is one case in which it isn't. But it seems to us that the Uniqueness theorist's reading is already a bad idea independently of this consideration, so we won't further pursue the introspection line here.

accept as rational the attitudes we've suggested for each agent at each stage of the example, the Uniqueness supporter will have to say that although E supports belief in  $\sim H$ , your belief in H after engaging in your reasoning is rational because E' supports belief in H. In other words, while E points to belief in  $\sim H$ , your falsely judging the opposite, then adding a fact about the content of that judgment to your total evidence, makes it rational for you to believe H.

This is a truly bad idea. Our Uniqueness theorist has now embraced a curious theory of evidential bootstrapping, on which an agent, by falsely judging that her total evidence supports some conclusion, can thereby make it the case that her (new) evidence does indeed support that conclusion. While this is bad enough, consider further your attitude, after performing your reasoning, toward the proposition that E supports belief in H. What attitude toward this second-order proposition is supported by E'? If E' supports belief in this proposition, then we have a false proposition made rational to believe by the fact that you have judged it to be true. On the other hand, if E' does not support belief in the second-order proposition,  $^{52}$  then you continue to rationally believe H on the basis of a judgment that your current evidence does not endorse.  $^{53}$ 

None of these positions is absolutely indefensible, but all of them seem tremendously awkward. Moreover, a Uniqueness defender need not accept them in order to maintain the Uniqueness Thesis. The Uniqueness defender bites these bullets only if she insists that were there any permissive cases, the Reasoning Room would not be one of them (so that the Reasoning Room cannot be used to assess the commitments of permissivism). Whether it's worth it for the Uniqueness theorist to make this move depends on what *motivates* her to believe in Uniqueness. For example, a Uniqueness defender driven by concerns about objectivity and/or consensus will not want the proposed reading of the Reasoning Room. Suppose we maintain Uniqueness for the Reasoning Room by counting facts about an agent's reasoning on a hypothesis as evidence relevant to that hypothesis. Then why not apply the same reading to rational scientific inquirers operating in isolation on the same body of empirical data? The moment one scientist has a thought about the significance of that data not shared by the other inquirers, her evidence will diverge from theirs and allow her to (rationally) reach different conclusions. The intuitively appealing idea that rational scientists confronted with the same data should draw the same conclusions will fall by the wayside.<sup>54</sup>

<sup>&</sup>lt;sup>52</sup>As (Titelbaum 2015) argues it cannot.

 $<sup>^{53}</sup>$ Here's another reason why this reading is a bad idea: We usually think that if something is an important piece of evidence for a conclusion, that evidence can be explicitly cited in favor of the conclusion. In the case at hand a *crucial* piece of evidence for H is the fact that you have judged E to support H (after all, without that fact in the body of total evidence, your evidence didn't support H). Yet would anyone ever cite, as part of their *evidence* for a hypothesis, the fact that they themselves judged their evidence to support it?

 $<sup>^{54}</sup>$ Since White seems very much motivated by consensus concerns, he should be uncomfortable with this Uniqueness-consistent reading of the Reasoning Room. White also endorses the principle that "a belief can always rationally survive learning the epistemic value of one's evidence." (2005, p. 450) Yet it does not seem under this Uniqueness reading of the Reasoning Room that your belief in H when your evidence is E' survives learning the true epistemic value of the evidence E.

### 5. Taking Stock

Our discussion has not identified any successful arguments for the Uniqueness Thesis. But we have identified the following motivations for the thesis (listed in the order in which we presented them, and keeping in mind that these motivations may overlap in places):

- (1) Diachronic Rationality Constraints Require Uniqueness: There are diachronic consistency constraints on rational attitudes, and this can only be the case if the Uniqueness Thesis is true.
- (2) Consensus Requires Uniqueness: If permissivism holds, disagreements will be unresolvable and certain kinds of consensus will be impossible to explain.
- (3) Objective Grounding Requires Uniqueness: A strong version of evidentialism requires that every justificatory influence on belief be grounded in evidence.
- (4) Permissivism Allows Arbitrary Causal Influences: If permissivism holds, there will be epistemically arbitrary causal influences on rational belief.
- (5) Truth-Conducive Standards Require Uniqueness: Rational evidential standards must be truth-conducive, but permissivism severs any connection between rational permissibility and truth-conduciveness.

Taking these out of order: Objective Grounding Requires Uniqueness only if one assumes a strong evidentialism. That version of evidentialism is a lively philosophical position, but in the present context is question-begging. If one is convinced that rational attitudes supervene on evidence, then one is already convinced of the Uniqueness Thesis. On the other hand someone unimpressed by this evidentialism will find no appealing motivation for Uniqueness in it.

It is true that *Permissivism Allows Arbitrary Causal Influences*. But agents' bodies of evidence are also in large part arbitrarily determined, and the influence of evidence on rational belief does not strike anyone as a problem. There might be a concern if typical batches of evidence were truth-conducive while typical evidential standards were not, but we have found no reason to suppose that is so. In fact, from a permissivist point of view it is more apt to speak of evidence's being truth-conducive relative to particular standards, and vice versa. So the two questions aren't as separable as they might at first seem. And there is no good reason to think that permissivism will make the weighing of evidence under rational evidential standards unconducive to accurate belief, so we see no reason to grant that *Truth-Conducive Standards Require Uniqueness*.

It's an interesting idea that Diachronic Rationality Constraints Require Uniqueness, but the literature on that topic is far from demonstrating anything conclusive. Finally, whether Consensus Requires Uniqueness depends on the particular kind of consensus sought. If we look to descriptive facts about the consensus actually found in our world, those facts are plausibly consistent with permissivism. A Subjective Bayesian could say that descriptive consensus found in isolation is due to humans' generally being equipped by their common evolution with similar hypothetical priors (forming perhaps a small range of those that would be rationally permissible to all sentient creatures, human and inhuman). There's also the possibility that the humans we observe have accumulated enough evidence for many differences in

their original priors to have "washed out".<sup>55</sup> Similar moves are available to epistemic goal-oriented permissivists, since evolutionary pressures surely make some epistemic goals more prevalent than others.

Descriptive consensus after consultation can be explained not only by these effects, but also by our observation in the Reasoning Room that permissivism may require agents with different standards to agree after exchanging views. That observation also makes normative consensus after consultation compatible with permissivism. So we are left to motivate the Uniqueness Thesis with the thought that separate inquirers, furnished with the same evidence, would if rational reach the same conclusions on various propositions. But again, this just is the Uniqueness Thesis (in its Personal—or more precisely InterPersonal—form), and no one who doesn't already believe the thesis will be swayed by this motivation.

So what other motivations for Uniqueness might there be? Probably a lot. Though we have tried to avoid "objective/subjective" talk, we are asking here about the objectivity of the evidential support relation. Whenever questions of objectivity are asked in philosophy, there are many avenues and many varieties of argument to explore. We will close by considering one more idea that we've sensed floating through the Uniqueness literature.

Concerns about objectivity are often concerns for authority. Permissivism (especially in acknowledged permissive cases) requires the agent to maintain a sort of equanimity about the variety of rationally permissible evidential standards. Yet while recognizing that her own standards are but one rationally permissible option among many, the agent is nevertheless supposed to treat those standards as authoritative—normative for her own case. Permissivism seems to create a tension between respecting other standards as equally valid and ceding the necessary authority to one's own.<sup>56</sup>

It's important not to commit a level confusion here. Agents adopt doxastic attitudes towards propositions—propositions that often concern objective facts in the world, beyond any ability of the agent to affect their truth-value. But the attitude adopted (belief or disbelief, high or low credence) is a subjective feature of the agent, not part of the attitude's propositional content. It does not automatically follow from the objectivity of what's believed that there is any objectivity to the norms for belief.

Still, our beliefs and credences play a serious role in our cognitive lives; beliefs in particular embody how we take the world to be. White and Kelly both consider whether permissivism requires "a departure from very natural ways of thinking about evidence and rationality." <sup>57</sup> It may be that in order to reason, and in order to properly embrace the conclusions of reasoning, we must take that reasoning to have a kind of authority that is possible only if it is uniquely correct. <sup>58</sup> Earlier we saw Sober write, "It is not good assigning prior probabilities simply by asking that they reflect how certain we feel that this or that proposition is true. Rather, we need to be able to cite reasons for our degrees of belief." (op cit.) If our standards are merely feelings, they may not supply reasons, and we may be unable to believe in the absence of reasons. There's a deep-seated tension in permissivism between rational

<sup>&</sup>lt;sup>55</sup>(Earman 1992, Ch. 6) summarizes Bayesian "washing out" results.

 $<sup>^{56}</sup>$ Thanks to Paul Boghossian for discussion on this point.

<sup>&</sup>lt;sup>57</sup>The phrase is from (White 2014, p. 315); Kelly discusses it at his (2014, p. 309).

<sup>&</sup>lt;sup>58</sup>Compare David Enoch's argument that realism about normative facts is indispensible for rational deliberation. (Enoch 2011, Ch. 3).

respect and normative authority; that tension may supply the best motivation for the Uniqueness Thesis. $^{59}$ 

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