

## Questions for Uniqueness (3408 words)

### Abstract:

In this paper, I argue that the so-called Uniqueness Thesis, or Uniqueness, is untenable because we cannot conceive of epistemic rationality as free of any practical components. Uniqueness states that given the same body of evidence, there is at most one rational doxastic attitude taken towards any proposition. Some authors, on the other hand, argue that it is rationally permissible to hold differing doxastic attitudes; call that view Permissivism. First, I provide a precise formulation for Uniqueness and evaluate some of the arguments for and against it. I show that many extant arguments against Uniqueness are question-begging and why these arguments fail. Finally, I offer a better argument against Uniqueness. My argument brings out that rational belief is not determined solely by evidence but also by the questions that guide one's inquiry.

### 1. Introduction

Given the same body of evidence, is it rational to possess differing doxastic attitudes towards a certain proposition? Some authors argue that it is permissible; call that Permissivism. Others oppose this view and argue for the so-called Uniqueness Thesis, or Uniqueness, which states that for agents with the same body of total evidence, there is at most one rational doxastic attitude taken towards any proposition. What I argue is that Uniqueness is untenable because we cannot conceive of epistemic rationality as free of any practical components. Although arguments have been provided *for* and against Uniqueness based on practical grounds, these arguments treat doxastic attitudes similarly with bodily actions. The practical component that I discuss here, on the other hand, is restricted to knowledge, i.e., how one inquires.

Kopec and Titelbaum (2016) point out that three versions of Uniqueness – *Propositional*, *Attitudinal*, and *Personal* – come out of the two formulations first offered by Feldman (2007) and White (2005). Feldman formulates Uniqueness 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 it justifies at most one attitude toward any particular propositions (2007: p. 405).

Feldman's formulation is a conjunction of two theses. The first pertaining to "at most one proposition" which Kopec and Titelbaum label as Propositional Uniqueness. The second, "at most one attitude", is labeled as Attitudinal Uniqueness. This paper primarily rejects Propositional Uniqueness as there can be more than one proposition rationally justified given one's total evidence. Additionally, the view of propositions discussed here takes propositions as objects of one's propositional attitude. Hence, a different proposition entails having a different propositional attitude; and an attitude rejecting a proposition can be generalized as not-*P*.

The case discussed here also takes up a theme surrounding Personal Uniqueness, which corresponds to White's formulation of the thesis. White formulates Uniqueness as follows:

Given one's total evidence, there is a unique rational doxastic attitude that one can take to any proposition (2005: p. 455).

Though some have pointed out that this formulation by White only pertains to a single agent (Kelly 2013; Meacham 2014; Schoenfield 2014), this doesn't matter much for my purposes here. We can imagine the case discussed here as comparing either the doxastic attitudes of two agents or two instances of the same agent, as long as this agent(s) is constrained by the conditions of Uniqueness formulated in §2.

While direct counterexamples have been offered (e.g. Brueckner and Bundy 2012; Kopec 2015; Raleigh 2017), my aim in this paper is to challenge a presupposition of Uniqueness, namely, that epistemic rationality is devoid of any practical influence. Feldman (2007), for example, presses the point that his "interest is in the epistemic, or evidential, evaluations" and not of practical rationality and that "a belief is reasonable *only* when it has adequate evidential

support” (p. 203, *my emphasis*).<sup>1</sup> Those who write about the topic, whether for or against Uniqueness, seem to follow suit in this presupposition – that epistemic rationality is free of any practical influences (see also Horowitz 2014; Christensen 2016; Greco and Hedden 2016; cf. permissivists Kopec and Titelbaum 2016; Sharadin 2017). Thus to say it explicitly: the goal of this paper is to show that even if we grant the strict demands of Uniqueness, it is still not going to yield the same rational doxastic attitudes because epistemic rationality is not only about one’s evidence, but also, how one inquires.

This paper is structured as follows: In §2, I evaluate some of the arguments for and against Uniqueness. I provide a formulation of Uniqueness based on the literature that argue for it. I show that many extant arguments against Uniqueness are question-begging and why these arguments fail. In §3, I offer a better argument against Uniqueness using tools from possible worlds semantics drawn from Stalnaker (1984) and Yalcin (2018). In §4, following Friedman (2013, 2017a, 2017b, 2018, ms.), my arguments will bring out that rational belief is not determined solely by evidence but also by the questions that guide one’s inquiry.

## 2. Unique and Permissive Updating

In order to see that many arguments against Uniqueness are question-begging, we must be precise in our formulation of the thesis.

**UNIQ** Two fully rational subjects must have the same doxastic attitude towards any proposition

*P* if (1) they started with the same ur-priors, (2) they possess the same body of total evidence, and (3) they have the same sensitivity to evidence.

---

<sup>1</sup> We might infer that Uniqueness is an extension of Evidentialism, first championed by Conee and Feldman (1985). Evidentialism states that “doxastic attitude *D* toward proposition *p* is epistemically justified for [subject] *S* at [time] *t* if and only if having *D* toward *p* fits the evidence *S* has at *t*.” But as Ballantyne and Coffman (2011) point out, Uniqueness entails Evidentialism but not the other way around.

Some arguments against Uniqueness fail because they ignore conditions (1)-(3). To aid the discussion, consider the following case<sup>2</sup>:

**JURY:** Cognizers Pula and Lila are serving as members of the jury in the trial of SuSpect for the alleged murder of VicTim. Both Pula and Lila will be exposed to the same body of total evidence. They will be asked whether they believe the proposition that SuSpect murdered VicTim (i.e. the  $P$  for this case).

### 2.1. Ur-Priors

White (2005) claims that what he calls ‘Extreme Permissivism’ is problematic. Extreme Permissivism is the view that rational cognizers can have different prior credences, i.e., different credences regarding a proposition even before either cognizer encounters any evidence for or against that proposition. In JURY, it is required that our agents avoid all biases. Uniqueness proposes that we should start with a neutral credence, or, at least, Uniqueness is meant to apply only when this condition holds.

Permissivists reject this claim as there is no clear account of what one’s neutral credence should be (see Kelly 2013; Kopec and Titelbaum 2016; Meacham 2014; Schoenfield 2014, 2018). But if there are different fully rational prior credence functions before one acquires new evidence, then we can deduce that cognizers can have different results once they update their credence functions in light of new evidence. Thus, they argue that Uniqueness fails.

Although I take it that identifying what these *unique* ur-priors might be is a pipe dream, this argument begs the question against UNIQ, in particular, condition (1). When applying Uniqueness, we assume that different cognizers started with the same ur-priors. In JURY, e.g., we

---

<sup>2</sup> This example is in light of the example originally given by Rosen (2001), and later on by White (2005).

assume that jurors are able to ignore any interfering *old evidence*.<sup>3</sup> If this assumption is false in a particular case, UNIQ is trivially true for that case because its antecedent is false.

## 2.2. Scope of Evidence

One might erroneously think that a case is a counterexample to Uniqueness if the case is one in which cognizers differ in their total evidence. Uniqueness would only apply to instances wherein cognizers have the same body of total evidence.<sup>4</sup> Matheson (2011: p. 363) made the case that cognizers may differ not in their first-order evidence, but their higher-order evidence.<sup>5</sup> Matheson adds, “(Uniqueness) is not a claim restricted to one’s first order evidence (or evidence directly pertaining to the dispute)”. Higher-order evidence changes the body of total evidence. On some views about higher-order evidence, this may result in differing doxastic attitudes. This is not a problem for UNIQ because it only applies if both cognizers have the same body of total evidence.

## 2.3. Epistemic Standards

The third condition I consider for UNIQ is that agents must possess the same epistemic standards whenever presented with the same body of total evidence. However, epistemic standards aren’t clearly defined in the literature. For the purposes of this paper, I assume epistemic standards are one’s sensitivity to evidence. Having the same epistemic standards would mean that two agents perceive the incoming evidence the same way.<sup>6</sup>

---

<sup>3</sup> Schoenfield (2014) used the term *irrelevant factors* which may include one’s upbringing or the community one grew up with among many others.

<sup>4</sup> See Rosen (2001), Decker (2012), Schoenfield (2014) and Titelbaum and Kopec (ms.) for counterexamples that defenders of Uniqueness might respond to as violating condition (2).

<sup>5</sup> He attributes this idea to Conee (2010) and Goldman (2010).

<sup>6</sup> One of the motivations for Uniqueness is that credences ought to be sharp or precise (see White 2005, 2010; Schultheis 2017). Preference over a range of credences (e.g. Schoenfield 2012) could run into problems. Elga (2010), for example, argues that permissive (or imprecise) credences cannot explain the rational constraints of how one would accept or reject a proposition. Elga acknowledges that sharp credences do not entail Uniqueness. Thus, I take it that precision is not sufficient. It also has to be accurate. A common topic of some recent papers is the *value question* first discussed by Horowitz (2014; see Schoenfield 2018 for a response), who argues that it is *valuable* to

### 3. Questions and Uniqueness

Given UNIQ, there shouldn't be variation on what cognizers can rationally believe. However, I show that our inquiry allows for rational variation when judging whether a proposition is the case or not the case even if we're given the same body of total evidence. I will thus argue that Uniqueness is false.

#### 3.1. Propositions in possible worlds

The view I offer builds on Stalnaker's (1984) possible worlds model. But first, following Stalnaker (1976b), I give an account of propositions which primarily takes propositions as objects of propositional attitudes, i.e. belief-states. They are also primary bearers of truth and falsity. In this account of propositions, however, propositions need not be represented linguistically as they are not necessarily conceptually structured (see also Lewis 1980).<sup>7</sup>

We begin by positing that logical space encompasses all possible worlds. Within logical space, propositions are conceived of as sets of possible worlds, understood as "ways the world might have been" (Stalnaker 1976a). Logical relations are defined as set-theoretic operations on sets of possible worlds.<sup>8</sup> For example,  $P$  entails  $Q$  iff  $P$  is a subset of  $Q$  or that there is no possible world in which  $P$  is true but  $Q$  is not.

For Stalnaker (1976b), to say that a proposition is (epistemically) *necessary* means that it is true across all possible worlds within a domain. A domain is a set of possible worlds that a cognizer considers as the potentially actual world<sup>9</sup> (see Figure 1). The belief-state of an agent is

---

promote *unique* rationality as it promotes accuracy in getting at the truth. The formal picture I establish later does not conflict with these two requirements.

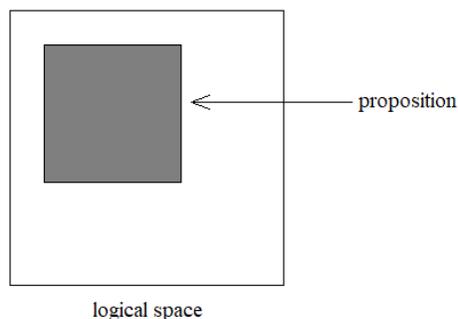
<sup>7</sup> This is important for my arguments found in §4. The other major views of propositions view propositions as conceptually structured. These include Fregean *Thoughts* and Russellian *Propositions*.

<sup>8</sup> For a good illustration on how these set-theoretic operations are applied to sets of possible worlds, see Chapter 2 of Titelbaum (ms.).

<sup>9</sup> For Stalnaker (1976a), saying that a world is actual indexes that world to the world one is currently in.

modeled by the set of possible worlds that are compatible with the agent’s beliefs. Thus, belief-states are modeled by propositions, i.e. sets of possible worlds.

Figure 1



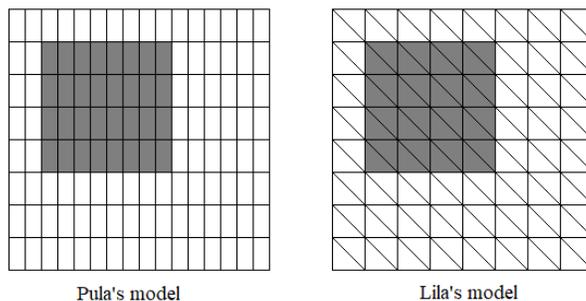
### 3.2. Belief Resolutions

In JURY, the proposition  $P$  is not entirely outside of the proposition that models the agents’ belief-states. Otherwise, the agents would already be certain that  $P$  is false, which would violate the presumption of innocence. Let’s call the proposition that models Lila’s belief-state and Pula’s belief-state – which we assume to be identical – at the start of the trial “ $R$ ”. Our account of propositions divides the logical space into a subset of possible worlds where  $R$  is the case and a subset where  $R$  is not the case. The proposition  $R$  is the former set. To arrive at a verdict regarding  $P$ , evidence is presented to both Pula and Lila. Let’s call the conjunction of all the evidence presented “ $E$ ”. This new evidence rules out the possible worlds where  $E$  is not the case. As we are working with qualitative belief-states (and not credences),<sup>10</sup> the new belief-state is simply the intersection of  $R$  and  $E$ . This intersection of  $R$  and  $E$  is not sufficient to show how we incorporate the two together. Inquiry is the tool to do just that, using questions to reopen previously held beliefs for belief-revision.

<sup>10</sup> If we work with credences and ordinary conditionalization, every proposition outside of this intersection would receive the credence 0 after updating with  $E$ .

Questions (i.e. what guides inquiry), unlike propositions, do not correspond to a (possible) state of the world. They do not possess truth conditions like propositions do (Friedman 2013). Instead, a question elicits information (i.e. evidence) pertaining to its contents.<sup>11</sup> Intuitively, questions are tools for asking someone something in a conversation. But in this model, they serve as instrumental (hence practical) tools that divide the logical space into fragments, corresponding to possible answers. How the logical space is divided depends on the kinds of questions one might have. This is what Yalcin (2018) refers to as *modal resolution* or simply *resolution*. The resolution between two rational cognizers may differ, for it is possible that they differ in how they pursue knowledge, i.e. one's questions. The partitioning of logical space is thus relativized to one's inquiry (see Figure 2). For demonstration purposes, the resolutions of Pula and Lila have an equal number of cells but vary on how the logical space is partitioned.

Figure 2



In comparison with the picture in Figure 1, a cell (or fragment of logical space) is not maximally specific. Accordingly, a belief-state is reduced to a belief partition which we will call a doxastic state. As I will argue in §3.3, once we take resolutions into account, we can see why

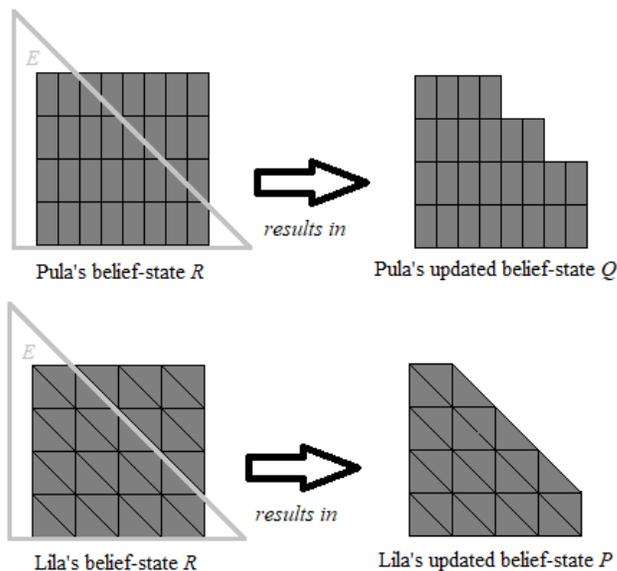
<sup>11</sup> Some of the literature that discusses the semantics of questions are as follows: Hamblin (1958), Hamblin (1973), Karttunen (1977), Groenendijk and Stokhof (1982), Belnap (1983) and Groenendijk and Stokhof (1984).

and how UNIQ fails. The key is that an agent whose doxastic state has a certain resolution must treat all possible worlds within a cell of their resolution in the same way.

### 3.3. Permissive Picture

I take it that we are actively seeking knowledge. Our senses gather information which we use to locate ourselves accurately in the space of all possible worlds. But given that we inquire differently, the ways that we fit answers to questions would lead to variation on what we rationally believe. In JURY, Pula might have questions that the presented evidence will not be able to answer. Whereas for Lila, those questions are considered unimportant. Given new evidence  $E$ , both Pula and Lila eliminate all possible worlds in minimal partitions that are not in the intersection of  $R$  and  $E$  to form their new doxastic states. If the evidence only rules out some but not all possible worlds within a cell, then that cell is retained as part of the maximal proposition. Figure 3 illustrates this update procedure.

Figure 3



In Figure 3, we observe that given the same evidence, Pula and Lila differ in their resulting maximal propositions, thus, having different belief-states.  $P$  entails  $Q$  because  $P$  is a

subset of  $Q$ , but  $Q$  does not entail  $P$ . While the evidence cuts perfectly to Lila's resolution, Pula has not ruled out some possibilities to believe  $P$ .

We can now see how UNIQ fails in our formal model. Pula and Lila start with the same doxastic state, they receive the same evidence, but they end up with different doxastic states. This happens because the doxastic states of Pula and Lila have different resolutions.

### 3.4. Norms of Inquiry

In this section, I argue that we must give full considerations to how inquiry influences what we take as the rational doxastic state given a body of total evidence. Inquiry is an integral part of epistemic rationality. Epistemic rationality is conceived as simultaneously possessing components that are inherently practical. This is because I take it that inquiry is a practical endeavor as its purpose is concerned with the acquisition of knowledge. To fully conceive of this connection between inquiry and what we consider as epistemic, commonly understood, I suggest a taxonomy of how we might think of inquiry. Drawing from the works of Friedman (2013, 2017a, 2017b, 2018, ms), I introduce three types of inquiry based on their association with the epistemic: *passive*, *proactive*, and *reactive*. An in-depth discussion of these types of inquiry are provided in the following subsections. More importantly, I develop claims based on how a proponent of Uniqueness might respond to my view. These claims will also attempt to demonstrate how we model resolutions in logical space.

To aid the discussion, consider what Friedman calls the 'zetetic dilemma':

**Overdose:** We are not actively engaged in trying to know  $\psi$ , yet may end up knowing about  $\psi$  when the opportunity presents itself to know  $\psi$ .

**Underdose:** We are actively engaged in trying to know  $\varphi$  but there is information other than  $\varphi$  that is available.

We find instances of Underdose when an agent is limited to only using proactive inquiry. In conducting an *active* investigation about  $\varphi$ , one is presented an opportunity to pass judgment on some information other than  $\varphi$  (Friedman 2018). This act of actively investigating about  $\varphi$  is what I call *proactive inquiry*. However, some epistemic theories demand we ought to take all available information as part of the total evidence. The overload of information distracts us from focusing on questions that we are trying to answer, i.e. the guilt or innocence of SuSpect. On the other hand, it seems that if we have an interest into knowing about  $\varphi$ , then we ought to take the best means in knowing  $\varphi$ , maybe, to avoid cluttering our minds with trivialities (Friedman 2017a).

However, Friedman (2018) argues that problems arise when we put constraints on what we can know based on what we aim to know, which is the second horn of the dilemma, Overdose. Lila and Pula come to know that the closest fire exit is behind them. If they are focused on knowing  $\varphi$ , then it is puzzling how they would come to know where the closest fire exit is. As we can see, we do not need to set desired ends to know something.

This brings us to the second type of inquiry. First, let me state that questions are not necessarily required to be represented by a linguistic sentence. They are also objects of attitudes which Friedman calls *Interrogative Attitudes* (Friedman 2013). This type of “wide-scope” inquiry related to general interrogative attitudes, such as wondering and curiosity, is what I’ll call *passive inquiry*. Passive inquiry is tied with the epistemic theories mentioned above.

If that is the case, Underdose does not arise even in the absence of a *specific* question whose contents pertain to  $\psi$ . However, what we have is a general question and brings about the other horn of the dilemma, Overdose. In our formal model, this divides the logical space with cells equivalent to every single possible world. This does not capture what happens when we

update our beliefs. Dividing logical space with partitions equivalent to every single possible world means we know every feature of each possible world. This commits us to the problem of logical omniscience, which is the problem resolutions meant to resolve (Yalcin 2018).

Thus, I must add, which restates my point in §3.2, that we update our belief-states by incorporating evidence using another type of inquiry. This, I think, is the solution to the dilemma. Following Friedman (2017b), once we acquire information about  $\psi$ , we open (or reopen) a question to update our beliefs. This allows us to pose specific questions that model our resolutions in light of new evidence. Thus, questions and evidence, which serve as answers, are inseparable. This type of inquiry I'll call *reactive inquiry*. For example, a witness is then invited to the stand. Whatever the witness says during their testimony is added as a conjunct to  $E$ . However, this can only be incorporated if we have 'that-witness's-testimony-sensitive' questions. Such questions may include: "Does the witness have other motives for stating such-and-such testimony?", "Where was the witness when the crime was committed?", or "Is the witness stating precisely what she had witnessed?". These questions can be multiplied into very many ways depending on the person's preference on how fine-grained their resolutions should be.<sup>12</sup>

What I hope to have shown here is that there is a corresponding inquiry whenever we talk about knowledge and that there are variations in usage. A proponent of Uniqueness might say that one's questions would alter the evidence, but this is only true of instances wherein one is engaged in proactive inquiry. In JURY, the cognizers are given constraints by sitting in the courtroom throughout the course of the trial. I assume that the questions they would use

---

<sup>12</sup> It is a question whether irrationality is even a possibility, according to my theory. However, I take it that some questions are good questions while others are not. Pérez Carballo (2018), for example, argues that a good question has higher epistemic utility.

whenever they are presented evidence are guided by reactive and passive inquiry. If not, then we can accuse them of *tampering* with the evidence and being *irrational*. For those who are conducting the investigation surrounding the trial of SuSpect, on the other hand, seems to have a say on what would count as evidence. Notice that investigators (or detectives) and jurors both have the same aims in what they're trying to know. But a juror would be irrational if they go looking for evidence like investigators do.

Whereas proactive inquiry might lead to performing actions, passive and reactive inquiry do not. Nevertheless, they are practical. Thus, what I mean by practical could be conceived of as matters based on one's mental action, on an inquiry's specific usage. I would like to make a stronger case about performative inquiry and how inquiry is present in *all* instances of our epistemic lives, but this would lead me astray beyond the scope of my thesis. I hope, however, that this is sufficient in showing that our epistemic norms and zetetic norms, which are practical, are inseparable if not identical.

## **5. Conclusion**

I have provided a precise formulation of Uniqueness. UNIQ states that in order to have the same doxastic attitude, cognizers must begin with the same ur-priors, possess the same body of total evidence, and have the same sensitivity to evidence. If these conditions are not met, then it is a case where Uniqueness does not apply. However, I argue that Uniqueness remains untenable even if we grant these conditions because evidence is not sufficient for belief. . If these conditions are not met, then it is a case where Uniqueness does not apply and therefore, not an argument against it. However, I argue that Uniqueness remains untenable even if we grant these conditions because evidence is not sufficient for belief. The questions one asks influence what one will end up believing, all epistemic things considered. Thus, I argue that Uniqueness is false.

## References

- Ballantyne, Nathan and E. J. Coffman. 2011. "Uniqueness, Evidence, and Rationality." *Philosophers' Imprint* 11:1–13.
- Belnap, Nuel. 1983. *Approaches to the Semantics of Questions in Natural Language. Meaning, Use, and Interpretation of Language*. Eds. R. Bauerle, C. Schwarze, and A. von Stechow. Berlin: Walter de Gruyter.
- Brueckner, Anthony and Alex Bundy. 2012. "On 'Epistemic Permissiveness'." *Synthese* 188: 165–77.
- Christensen, David. 2016. "Conciliation, Uniqueness and Rational Toxicity." *Noûs*, 50(3), 584-603.
- Conee, Earl. 2010. "Rational Disagreement Defended." *Disagreement*. Eds. R. Feldman and T. Warfield. Oxford: Oxford University Press.
- Feldman, Richard and Earl Conee. 1985. Evidentialism. *Philosophical Studies*, 48(1), 15-34.
- Decker, Jason. 2012. "Disagreement, Evidence, and Agnosticism." *Synthese* 187: 753–83.
- Elga, Adam. 2010. "Subjective probabilities should be sharp." *Philosophers' Imprint*, 10(5).
- Feldman, Richard. 2007. "Reasonable Religious Disagreements." *Philosophers Without Gods*. Ed. L. Antony. Oxford: Oxford University Press, 194–214.
- Friedman, Jane. 2013. "Question-directed attitudes." *Philosophical Perspectives* 27(1): 145-174.
- . 2017a. "Junk Beliefs and Interest-Driven Epistemology." *Philosophy and Phenomenological Research*.
- . 2017b. "Inquiry and Belief." *Noûs*.
- . 2018. "Teleological epistemology." *Philosophical Studies* 1-19.
- . The epistemic and the zetetic (ms.)

- Goldman, Alvin. 2010. "Epistemic relativism and reasonable disagreement." *Disagreement*. Eds. R. Feldman and T. Warfield. Oxford: Oxford University Press. 187–215.
- Greco, Daniel, and Brian Hedden. 2017. "Uniqueness and metaepistemology." *The Journal of Philosophy* 113(8): 365-395.
- Groenendijk, Jeroen and Martin Stokhof. 1982. *wh-Complements*. *Linguistics and Philosophy*. 5(2):175–233.
- . 1984. *Studies in the Semantics of Questions and Pragmatics of Answers*. Ph.D. dissertation, University of Amsterdam, Amsterdam.
- Hamblin, Charles L. 1958. Questions. *Australasian Journal of Philosophy*. 36(3). 159–168.
- . 1973. Questions in Montague English. *Foundations of Language*. 10(1). 41–53.
- Horowitz, Sophie. 2014. "Immoderately Rational." *Philosophical Studies*. 167: 41–56.
- James, William. 1897 (1979). *The Will to Believe and Other Essays in Popular Philosophy*. Cambridge, MA: Harvard University Press.
- Karttunen, Lauri. 1977. Syntax and Semantics of Questions. *Linguistics and Philosophy* 1(1). 3–44.
- Kelly, Thomas. 2002. "The rationality of belief and some other propositional attitudes." *Philosophical Studies* 110 (2): 163-196.
- . 2003. "Epistemic rationality as instrumental rationality: A critique." *Philosophy and Phenomenological Research* 66, (3): 612-640.
- . 2013. "Evidence Can Be Permissive." *Contemporary Debates in Epistemology*, 2nd ed. Eds. M. Steup, J. Turri, and E. Sosa. Hoboken: John Wiley & Sons, 298–311.
- Kopec, Matthew. 2015. "A Counterexample to the Uniqueness Thesis." *Philosophia* 43: 403–9.

- Kopec, Matthew, and Michael Titelbaum. 2016. "The uniqueness thesis." *Philosophy Compass* 11, (4): 189-200.
- Lewis, David. 1980. "Index, Context and Content," in Lewis (1998), 21–44.
- Matheson, Jonathan. 2011. "The Case for Rational Uniqueness." *Logos & Episteme* 2: 359–73.
- Meacham, Christopher. 2014. 'Impermissible Bayesianism.' *Erkenntnis* 79: 1185–217.
- . 2018. Deference and Uniqueness. *Philosophical Studies*, 1-24.
- Pérez Carballo, Alejandro. 2018. "Good Questions" *Epistemic Consequentialism*. Eds. K. Ahlstrom-Vij and J. Dunn. 123.
- Quine, W. V. O. 1976. "Two dogmas of empiricism." In *Can Theories be Refuted?*, pp. 41-64. Springer, Dordrecht.
- Raleigh, Thomas. 2017. "Another argument against uniqueness." *The Philosophical Quarterly* 67(267): 327-346.
- Rosen, G. 2001. "Nominalism, Naturalism, Epistemic Relativism" *Philosophical Perspectives* 15: 69–91.
- Schoenfield, Miriam. 2012. "Chilling out on epistemic rationality." *Philosophical Studies* 158(2): 197-219.
- . 2014. "Permission to believe: Why permissivism is true and what it tells us about irrelevant influences on belief." *Noûs* 48(2): 193-218.
- . 2018. "Permissivism and the Value of Rationality A Challenge to the Uniqueness Thesis." *Philosophy and Phenomenological Research*.
- Schultheis, Ginger. 2017. "Living on the edge: Against epistemic permissivism." *Mind* 127(507): 863-879.
- Sharadin, Nathaniel. 2017. "A partial defense of permissivism." *Ratio* 30 (1): 57-71.

- Stalnaker, Robert. 1976a. "Possible worlds." *Noûs* 65-75.
- . 1976b. "Propositions." *Issues in the Philosophy of Language* 79–91.
- . 1984. *Inquiry*. MIT Press.
- Titelbaum, Michael. "Probability Distributions" in *Fundamentals of Bayesian Epistemology*.  
(forthcoming). Accessed via [http://fitelson.org/bayes/titelbaum\\_ch2.pdf](http://fitelson.org/bayes/titelbaum_ch2.pdf)
- Titelbaum, Michael, and Matthew Kopec. "When rational reasoners reason differently."  
*Reasoning: Essays on Theoretical and Practical Thinking*. M. Balcerak-Jackson and  
B. Balcerak-Jackson eds. Oxford University Press (forthcoming).
- White, Roger. 2005. "Epistemic Permissiveness." *Philosophical Perspectives* 19: 445–59.
- . 2010. "Evidential symmetry and mushy credence." *Oxford studies in epistemology* 3(161):  
20.
- Yalcin, Seth. 2018. "Belief as Question-Sensitive." *Philosophy and Phenomenological Research*.  
97(1): 23-47.