

EPISTEMIC AND PRAGMATIC PRINCIPLES FOR AN UNCERTAIN WORLD

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Fantl, Jeremy and McGrath, Matthew. *Knowledge in an Uncertain World*. Oxford GB: Oxford University Press 2009. 251 pages.

A central goal of Jeremy Fantl and Matthew McGrath's insightful *Knowledge in an Uncertain World*¹ is to defend the idea that we are (or at least should be) committed to certain fundamental pragmatic principles about knowledge and justification which connect knowing and being justified in believing to reasons for acting and believing, to rational action and belief. These principles reflect invariant necessary conditions on knowing that p and being justified in believing that p —invariant in the sense that such pragmatic requirements on knowing/being justified in believing do not come and go with changes in context. One of the most important and explanatorily significant principles of this sort is

KJ: If you know that p , then p is warranted enough to justify you in \emptyset -ing, for any \emptyset .

This formulation is potentially subject to misreading so it is important to note that, though the authors allow some flexibility in interpretation, the binary notion of *being justified in \emptyset -ing* is best understood in terms of obligation, rather than permission: you are justified in \emptyset -ing if you are such that you should \emptyset . By “ p is warranted enough to justify you in \emptyset -ing” the authors mean that your level of epistemic warrant for p doesn't *stand in the way of* p 's justifying you in \emptyset -ing: if you fail to be justified in \emptyset -ing, it isn't even in part for want of greater epistemic warrant for p .

Two further clarifications of KJ are in order. First, the broadest construal of “justify you in \emptyset -ing, for any \emptyset ” takes \emptyset -ing to cover any action, mental state, attitude, preference, etc. for which one can have justifying reasons. A purely doxastic version of KJ limits \emptyset -ing to believing that q , for any q . Second, the “ \emptyset -ing, for *any* \emptyset ” can be read as either unrestricted, or as restricted in some

1 Fantl, Jeremy and McGrath, Matthew. *Knowledge in an Uncertain World*. Oxford GB: Oxford University Press 2009.

fashion to any relevant/salient/available/appropriately related \emptyset . We will refer to these two additional interpretative options as *Unrestricted-KJ* and *Restricted-KJ*, respectively. Fantl and McGrath remain neutral in the book on which of these two options is preferable.

They are also surprisingly non-committal on which of two paths we should take once we recognize the truth of KJ: infallibilist purism or fallibilist impurism about knowledge, where fallibilism about knowledge is the view that knowing that p is compatible with there being an epistemic chance that not- p and purism about knowledge is the view that two subjects with the same strength of epistemic position with respect to p cannot differ in whether or not they are in a position to know that p , even if their practical circumstances differ. Though quite confident that, in light of KJ and co., fallibilism is incompatible with purism, in *Knowledge in an Uncertain World* they are less sure that infallibilism is unacceptable. Purism remains an option for those who are at peace with infallibilism.

While some readers may be frustrated by the authors' unwillingness to commit when a philosophical matter strikes the authors as underdetermined by the considerations currently available, the resulting framework linking knowledge and reasons for acting and believing can be accommodated by a wide variety of epistemic stances (save for radical externalism). The intuitive idea bolstered by and expressed in their intricate, carefully constructed, framework of epistemic principles—the idea that *you can put what you know to work* as a reason for action and belief—should have broad appeal. What you know is eligible to serve as a favoring reason (because true), a justifying reason (because justified), and a motivating reason (because believed).

The framework also emphasizes and clarifies some of the inter-relations between binary epistemic notions, such as knowing, being justified in believing, being warranted enough to justify, having justifying reason, and graded ones, such as degree of credence, level of warrant, and strength of epistemic position, so even somewhat Bayesian-minded epistemologists are in a position to accept it.

Though infallibilist purism is left open as an option, the authors offer plenty of guidance on how fallibilism could be made to work in conjunction with their principles. To avert the charge that fallibilism leads to the madness of unacceptably clashing conjunctions (I know that p , and it might be that not- p), for instance, fallibilists should say that knowing that p is incompatible, not with *any* chance of error, however idle, but rather only with *significant* chance of error—a chance of error that stands in the way of putting p to work as a justifying reason for action and belief. Unrestricted-KJ may pose a problem

for the fallibilist, however, since \emptyset can range over S's current preferences and dispositions for belief and actions in certain counterfactual situations (such as her beliefs about what choices would be best under various counterfactual conditions). Say that S fallibly knows that p . Even if S is in a situation where her level of warrant for p is high enough that it doesn't stand in the way of p being a justifying reason for any of her currently available and considered candidates for action and belief, is p warranted enough to justify her in thinking it would be best for her to accept a high stakes gamble on p for a low payoff if p and extremely high cost if not- p , should one be offered to her in the future? Is p warranted enough to justify her in supposing that acting in accordance with p would still be the way to go in a counterfactual situation where the evidential conditions are the same, but the harms of acting as if p when not- p are far worse? Is p warranted enough to justify her in believing that any apparent counterevidence to p she might encounter in the future is misleading and should be discounted, or for thinking she should infer not-Sk, if someone happens to describe a skeptical possibility Sk where not- p and all her evidence e for p is misleading? Is p warranted enough to justify her in being disposed to conclude that q on the basis of an otherwise convincing argument which relies on p as a premise, or in the event that strong evidence for r and $(r \& p) \rightarrow q$ arises, even if the chance that not- q is and would remain non-idle? One may be tempted to answer "no" to at least some of these questions, and hence to think that there will always be some such \emptyset for S where p is not warranted enough to serve as a justifying reason for \emptyset -ing, unless p is epistemically certain for S. Without restricting the "for any \emptyset " in KJ to relevant, salient, considered, or available \emptyset , or conditions for \emptyset -ing, KJ seems to entail that you can know that p only if there is no epistemic chance for you that not- p . Unrestricted-KJ seems to lead to infallibilism.

Given the strength of the case for KJ, the best and most straightforward option for the fallibilist at this point would seem to be to opt for Restricted-KJ. Even so, the authors offer a reply (to something like the worries voiced above) on behalf of the fallibilist who might wish to retain Unrestricted-KJ. Though a quick summation cannot do justice to the complexity and subtlety of their proposal, the underlying trick seems to be that the relevant conditionals about what it is best for the agent to do or believe if C are *warranted enough* to justify/serve as justifying reasons for having the relevant preferences and dispositions for belief and action given C. Nonetheless, they fail to justify/be justifying reasons for such preferences and dispositions because they constitute *junk knowledge* with respect to C: if C were to obtain, S would no longer know that p , and hence she would lose her basis for accepting them. It is not

their level of epistemic warrant that stands in the way of their being justifying reasons; it is their status as junk knowledge. So, while p is *warranted enough* to justify having the conditional preferences and dispositions (i.e. if having the preferences and dispositions fails to be justified, it won't be for lack of warrant for p), it ultimately fails to justify having them because the relevant intervening conditionals constitute junk knowledge. Such an approach seems to work, but with a price—the awkwardness of insisting that S 's level of epistemic warrant for p isn't really standing in the way of S 's being justified in having the conditional preferences and dispositions, even though strengthening S 's warrant for p could make all the difference, turning the junk into gold.

While Restricted-KJ may seem like the easier way to go for the fallibilist, a Restricted-KJ which is too restricted may have its own extra burdens. Consider cases, like Ram Neta's 'State and Main example,' where a subject S has the same strength of position with respect to p and q , and faces the same kind of evidence or grounding for p and q , but where the practical stakes of acting on p and acting on q are different (the harms of acting on q if not- q are catastrophic, whereas acting on p if not- p is inconsequential). Kate is at an intersection and sees two street signs, one saying "State Street," and the other saying "Main Street." Whether or not she is on Main Street is a very urgent matter; whether or not she is on State Street is inconsequential. It seems very counterintuitive to suggest that Kate knows she is on State Street, but she doesn't know she is on Main Street. KJ itself doesn't imply this counterintuitive verdict: KJ is just a pragmatic necessary constraint on knowledge, and all we can say in light of it is that Kate doesn't know she is on Main street. However, given that KJ combined with fallibilism about knowledge generally implies impurism about knowledge, there had better be a principled way for the fallibilist to avoid the counter-intuitive verdict in this class of cases. Fallibilists can avail themselves of some of the helpful suggestions raised by the authors. Perhaps we subscribe to

The Global Warrant Principle: If your epistemic position with respect to p is no stronger than your epistemic position with respect to q , then, for all ϕ , if q isn't warranted enough to justify you in ϕ -ing, p isn't warranted enough to justify you in ϕ -ing. (203)

Or, seizing on the idea that p and q in the cases at hand are significantly similar or related, perhaps we should say that a somewhat narrower principle is at work, where the relevant sense of *closeness* requires further exploration and development (similarity of content, similarity of source of evidence, both being active objects of consideration ...):

The Local Warrant Principle: If your epistemic position with respect to p is no

stronger than your epistemic position with respect to q , and p is close enough to q , then, for all \emptyset , if q is not warranted enough to justify you in \emptyset -ing, then neither is p . (206)

Here, Unrestricted-KJ (or at any rate, somewhat-less-restricted-KJ) seems to offer a certain advantage for the fallibilist, for something like the local warrant principle doesn't require as much independent philosophical defense. Particularly when p and q are close in the sorts of ways suggested by the authors, there are good candidates for preferences and attitudes where p is not warranted enough to justify S in \emptyset -ing: being disposed to conclude that q on the basis of an otherwise convincing argument which relies on p as a premise, should such an argument come along; preferring/being willing/thinking it would be appropriate to infer q in the event that strong evidence for r and $(r \ \& \ p) \rightarrow q$ arises. Kate sees that one sign says "Main Street" and the other says "State Street," but she is not disposed to conclude that she is on Main Street under conditions where she receives strong evidence that one sign's being accurate nearly guarantees that all the others are accurate. That she is on State Street is not warranted enough to justify her in being inclined to draw such a conclusion in light of such evidence. KJ applied to such a situation yields the consequence that, in addition to S's failing to be in a position to know that q , S also fails to be in a position to know p —our desired result. Now, such a response would have to be reconcilable with the junk knowledge maneuver undertaken above. When undertaking the junk knowledge maneuver, the fallibilist will want to say *p is warranted enough* to justify having the relevant conditional preferences and dispositions; here, to handle State and Main street-type cases, the fallibilist will want to say that *p isn't warranted enough* to justify having the relevant conditional preferences and dispositions. Perhaps the closeness of p and q account for the difference in treatment. On the other hand, perhaps the closeness of p and q somehow contributes to making the conditional preferences and dispositions relevant, and Restricted-KJ emerges yet again as the better option for the fallibilist.

Fantl and McGrath do a splendid job in revealing the intricate and intimate relationships amongst our principles concerning justified action and belief, and reasons for action and belief. A particularly welcome feature of this program is its accommodation of both the traditional, binary conception of belief (where outright belief is contrasted with disbelief and suspension of belief), and the notion of degree of belief, or credence. The authors express some sympathy with purism about justification for credences (153), as well as with a pragmatist understanding of the relation between outright belief and degree of belief. Their framework is compatible with a wide range of possible

pragmatist principles linking outright belief and degree of belief, from the weak

Weak Pragmatic View: You believe that p iff there is some \emptyset such that your credence in p is high enough for p to be your motivating reason to \emptyset . (139)

to the strong

Pragmatic Belief: You believe that p iff your credence is high enough for p to be your motivating reason for \emptyset -ing, for all relevant \emptyset . (160)

The authors even spell out a credal variant of one of their central epistemic principles explicitly:

Credal Variant of Biconditional JJ: You are justified in believing p iff you are justified in being such that your credence for p is high enough for p to be your motivating reason for \emptyset -ing, for all \emptyset . (137)

Pragmatist principles linking outright belief with degree of belief might seem to lead very readily to pragmatic constraints on justified believing. Even just the left-right direction of the biconditional in Pragmatic Belief seems to lead rather quickly to a pragmatic constraint on justified believing, and a kind of impurism about justified believing (provided you are a fallibilist about justified believing). If you believe that p only if your credence is high enough for p to be your motivating reason for \emptyset -ing (for all relevant \emptyset), then in order for your believing that p to be epistemically justified, it better turn out that a credence high enough for p to be your motivating reason for \emptyset -ing (for all relevant \emptyset) is warranted. Your epistemic position with respect to p has to be strong enough for you to be warranted in having a credence high enough for you to be willing to act under the assumption that p . However high that credence is, there has to be enough evidence to support such a credence. In a situation where you recognize that acting under the assumption that p is higher risk, believing that p requires a higher level of credence, and, in turn, justified believing requires a stronger epistemic position. Indeed, one might begin to wonder if pragmatist principles linking outright belief and credences provide for some sort of shortcut through the long, and sometimes difficult path of arguments and principles carefully laid out by the authors. Such hopes are misplaced, however. The authors go some way towards showing why it would be a mistake to regard their central principles as readily derivable from or explained by pragmatic principles concerning outright belief. I would like to add to their case, and make some clarificatory remarks since I think certain misunderstandings or misreadings are likely to arise. For ease of comparison, I'll refer to the argument just re-

heard as the *Quick-Route Argument* from pragmatic constraints on outright belief to pragmatic constraints on epistemic evaluation.

One can easily misread the Credal Variant of Biconditional-JJ, and suppose that *justified in believing* on the left side of the biconditional is similar to or related to the sense of *justified* applied to believing in the Quick Route Argument, the main difference being that Biconditional-JJ concerns propositional justification. One might think that the sense of propositional justification which contributes to securing doxastic justification in the Quick Route Argument just is the sense of propositional justification at issue in the Credal Variant of Biconditional-JJ. Similarly, one might suppose that the sense of *justified in being such that your credence for p is high enough for p to be your motivating reason for \emptyset -ing, for all \emptyset* is similar to or related to the sense of warrant or justification which is applied to your level of credence in the Quick Route Argument. Such an interpretation may be tempting, but it neglects to figure in how Biconditional JJ is derived from practices involving the interplay of our epistemic evaluations and our practice of identifying reasons for \emptyset -ing—of counting such reasons as reasons there are for \emptyset -ing (favoring reasons), as reasons you have for \emptyset -ing (justifying reasons), and as reasons why you \emptyset (motivating reasons). This interpretation also neglects to take into account that the authors' intend *justified in believing* to be a condition of obligation with respect to binary belief: amongst the three options believe that p , disbelieve that p , or suspend judgment concerning p , if you are to take any attitude at all with respect to p , you ought to believe that p .

There is an ambiguity in the right side of the Credal Variant of Biconditional-JJ as stated above, and it is easy to fall into to the trap of disambiguating the right side in a way which is at odds with what the authors intend. Cases involving agents we regard as excessively lax or reckless (requiring very little confidence in order to act on p when risks are high than most of the rest of us) or excessively cautious and neurotic (demanding far greater confidence in order to act on p even when risks are low) help to bring out the difference between the wrong and the right-headed interpretation. Consider, for example, a parent who, purely out of ease and convenience, puts her infant in the front seat of the car where an airbag has been installed. Her degree of belief that p —that the car will not get into an accident—is the same as ours, and equally well calibrated to the evidence for p , but she requires far less confidence in p to be motivated to act on the assumption that p : she requires very little confidence in p for p to be her motivating reason for \emptyset -ing—for putting her child in the front seat of the car. Indeed, she is perfectly willing to act on the assumption that p for all relevant actions, so she meets the pragmatic requirement for believing that

p. So the framework of the Quick Argument allows that her belief that *p*, and her degree of belief that *p* are in some sense justified.

But is she *justified in believing* that *p*, in the sense at issue in the Credal Variant of Biconditional-JJ? Is she *justified in being such that her credence for p is high enough for p to be her motivating reason for \emptyset -ing* in the sense at issue in the Credal Variant of Biconditional-JJ? I think not. *That the car will not get into an accident* is not suitable as a justifying reason in the situation at hand. The child is too precious and the hazards of driving too great for the mother's epistemic position with respect to *the car will not get into an accident* to be strong enough to serve as a justifying reason for \emptyset -ing, for putting the child in the front seat. It is neither a reason there is, nor a reason she has for \emptyset -ing (though it can be a motivating reason for \emptyset -ing). The mother's strength of epistemic position with respect to *p* is not great enough in the circumstances of risk for it to be the case that, among the available options—believe that *p*, disbelieve that *p*, or suspend judgment that *p*—she ought to believe that *p*. It is true in the case at hand that her credence for *p* is high enough for *p* to be her motivating reason for \emptyset -ing, and this level of credence is well-calibrated to the evidence; nonetheless, she ought *not* be such that her credence for *p* is high enough for *p* to be her motivating reason for \emptyset -ing. She ought, like the rest of us, to outright believe, to reason from, and to act on at best only the proposition that *most likely the car will not get into an accident*, and put the precious cargo in the back seat.

The principle, construed the right way, reveals that there is considerable interplay between certain varieties of epistemic evaluation and our judgments about whether or not acting or adopting further beliefs on the basis of *p* is rationally acceptable in light of practical features of the situation. Being justified in believing that *p* (i.e. being such that, if you take any attitude towards *p* at all, amongst the options of believing that *p*, disbelieving that *p*, or suspending judgment with respect to *p*, believing that *p* is the one you ought to have), has the same requirement as knowing that *p*. Your epistemic position with respect to *p* has to be strong enough that it does not stand in the way of *p* being your basis, your justifying reason for acting and adopting further beliefs: *p* has to be warranted enough to justify you in \emptyset -ing, for all relevant \emptyset .

Whatever the ultimate fate of impurist fallibilism or purist infallibilism in this uncertain world, *Knowledge in an Uncertain World* bears the promise of making genuine, and lasting progress in our understanding of the complex network of principles underlying our epistemic evaluations, and assessments of the rationality of action and attitude. The work is meticulous and challenging. (The glossary at the end is helpful, and the reader may wish to write out and arrange all the principles on index cards to better understand their interrela-

tions, as I did.) But it also stands out as a model of philosophical clarity, depth, and rigor. He or she who reads the book with understanding will likely find many of its insights convincing and definitive.

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