Kantian Fallibilism:
Knowledge, Certainty, Doubt

ANDREW CHIGNELL
Princeton University

Abstract: For Kant, knowledge (*Wissen*) involves certainty (*Gewissheit*). If "certainty" requires that the grounds for a given propositional attitude *guarantee* its truth, then this is an infallibilist view of epistemic justification. Such a view says you can't have epistemic justification for an attitude unless the attitude is also true. Here I want to defend an alternative *fallibilist* interpretation. Even if a subject has grounds that would be sufficient for knowledge if the proposition *were* true, the proposition might not be true. And so there is sometimes still rational room for doubt. The goal of this paper is to present four different models of what "certainty" amounts to, for Kant, each of which is compatible with fallibilism.

Key words: Kant, fallibilsm, certainty, doubt, justification, knowledge

> Fallibilism is the epistemic position between Dogmatism and Skepticism.—C. S. Peirce

A. INTRODUCTION

Kant characterizes knowledge (*Wissen*) in the *Critique of Pure Reason* like this:

> Finally, assent (*Fürwahrhalten*) that is both subjectively and objectively sufficient is called *knowing*. (A822/B850)

Assent (literally "holding-for-true") is a generic term for Kant that covers many different kinds of positive propositional attitudes. These include the attitude that philosophers now call "belief" as well as a range of related attitudes such as assuming, accepting, opining, and having faith (*Glaube*).

What Kant calls "*objective sufficiency*" is a composite state of affairs that connects an assent to its truth via a ground or reason. It can be analyzed in this way:

S's assent that *p* is *objectively sufficient* iff (∃*g*) such that

> (i) *g* is a ground that S has,
>
> (ii) *g* is a sufficient objective ground for assenting to *p*, and
>
> (iii) *p* is true.

Clearly, (i) has to do with the subject. S must have or *possess a ground* for the assent (I won't try to say anything here about what such possession consists in.[1]) (ii) says that that ground must be a *sufficient objective* ground—that is, sufficient for the assent to count as knowledge if it is true. What makes a ground sufficient in the objective way is some sort of truth-conducive connection between a subject's having the ground (experience, or evidence of some other sort) and the truth of the proposition.

(iii) is different—it is not about the subject or the grounds but rather about the truth of *p*. The inclusion of (iii) in the analysis means that there is a conceptual difference between *having a sufficient objective ground for assenting to* p (that's just the conjunction of (i) and (ii)), and the assent itself *being objectively sufficient* (which requires (iii)).

The debate between fallibilist and infallibilist interpreters of Kant is effectively a debate about whether this is *merely* a conceptual difference. In other words, it is a debate about whether (i) and (ii) can come apart from (iii), or whether they jointly entail (iii). Can a subject possess a sufficient objective ground for an assent that *p*, and yet *p* turn out to be false? The infallibilist says No, the fallibilist says Yes. Is there rational room for doubt regarding *p*, even when one has a sufficient objective ground for it and knows that this is the case? The infallibilist says No, the fallibilist says Yes.[2]

My goal in this paper is to argue that the fallibilist is correct, and to square that with Kant's apparent infallibilist sentiments in various key passages. In the sentence following the one cited above, for instance, Kant says that "objective sufficiency is called *certainty* (for everyone)" (A822/B850, original bold). Fallibilist readers need a story about certainty that prevents such texts from torpedoing their interpretation.

I start by looking further at the key texts and the interpretive debate (section B) and then briefly survey the undeniably infallibilist picture of epistemic justification that we find in Locke (section C). After that I lay out in more

---

1.   See Chignell 2007 for more details.

2.   There is rational room for doubt if one recognizes (on rational grounds) that there is some chance that one's assent is false. This is different from it being *reasonable* for some subject to doubt—that typically tends to require much more than "some chance" of falsehood. Descartes's meditator collapses the distinction, at least when sitting before the fire and doing philosophy. But in most contexts the distinction holds up. Thanks to Yuval Avnur for discussion here.

detail what Kant has to say about certainty and doubt (section D) before going on to sketch four models of how what he says might fit within a fallibilist picture (section E). I end by highlighting some of the extra-textual benefits of opting for a fallibilistic interpretation (section F).

A final introductory note: In the passage from the *Critique* quoted at the outset, Kant says that knowing requires not just objective sufficiency but also *subjective sufficiency*. In my view this is a weak access constraint: the subject has to be in a position to cite what she in good faith takes to be her objective grounds for assent.[3] This goes beyond what condition (i) says, since it's possible to have a ground without being in a position to reflectively cite it. In what follows, however, I will largely ignore this subjective condition on knowledge in order to focus on objective sufficiency.

B. THE FALLIBILISM DEBATE

B.1. Kant's Apparent Infallibilism

In the pragmatist (Peircean, Quinean) tradition, fallibilism is the view that *every belief is in principle revisable*—that nothing is absolutely apodictically certain, and everything can in principle be doubted. Kant's fallibilism is not that pervasive: he clearly thinks that we are capable of achieving some assent that is absolutely certain (and ungiveupable): *a priori* knowledge of both the analytic and synthetic sort, for instance.

Kantian fallibilism is also not the (exceedingly unpopular) view according to which knowledge is non-factive—i.e., that we can know that p and yet p still be false. Like most philosophers in the western tradition, Kant is committed to the Platonic idea that knowledge is factive (and hence (iii)—the truth condition).

Instead, again, Kantian fallibilism says simply that a subject can have objective grounds for assent that p which are such that, *if p were* true, then the assent would count as knowledge; and yet p turn out to be false. In the contemporary literature this is sometimes referred to as *fallibilism about knowledge* and sometimes as *fallibilism about epistemic justification* or *warrant* (see Brown 2018 for very helpful disambiguations). In order not to confuse it with non-factive accounts of knowledge, and to avoid having to answer anachronistic questions about Gettier cases, I propose to characterize it using Kant's own terminology as *fallibilism about sufficient objective grounds*, or *SOG-fallibilism* for short.

---

3. Note: this does not require that she has a sophisticated understanding of what *makes* them sufficient, or how probable they render the assent, and so on. Again, see Chignell 2007 for details. For a sustained argument according to which subjective sufficiency at least sometimes requires more than this, see Hebbeler, forthcoming.

One corollary of SOG-fallibilism is that it is possible for a subject to have SOG for *p*, and even know that this is the case, and yet there still be rational room for doubt about whether *p* is true. (It need not always be reasonable *for the subject* to doubt, however, since the fallibilistic SOG might make *p* extremely likely for her.) In a formula:

> *Fallibilism*: Possibly, S has sufficient objective grounds (SOG) for assent that p, and p is false.

The kind of infallibilism that I propose to argue against here consists in the rejection of *Fallibilism*. Kantian infallibilists allow that there is a conceptual difference between having sufficient objective grounds for an assent, and the assent's objective sufficiency, but they will insist that an assent that has the former is also the latter, and thus true. In a formula:

> *Infallibilism*: Necessarily, if S has sufficient objective grounds (SOG) for assent that p, then p is true.

When Kant associates knowledge with "certainty (*for everyone*)" in the passage from the end of the *Critique* above, he is clearly referring to an objective, worldly notion of certainty (*Gewissheit*). In other words, it is not about degrees of *subjective, psychological confidence* but rather about degrees of *truth-conducive* or *metaphysical connection* between the subject's grounds and the assent, where the strongest version of this connection would be entailment.[4] That is presumably why it is "for everyone." If we assume that such certainty requires a *maximal* degree of worldly connection, then it does seem like Kant is endorsing *Infallibilism*: only grounds that *entail* the truth of *p* are sufficient for knowledge that *p*. And thus, if we know that *p*, there is no rational room for doubt.

In addition to that passage from the *Critique*, infallibilist interpreters can cite related passages from Kant's lectures on logic. In the Jäsche lectures published four years before Kant's death (and which were approved by the aged professor), Kant is reported as saying:

> What I *know*, finally, I hold to be *apodictically certain*, i.e., to be universally and objectively necessary (holding for all), even granted that the object to which this certain assent relates should be a merely empirical truth. (9:66)

And in the Dohna-Wundlacken lectures from the 1790s, Kant reportedly said:

---

4.   Kant himself distinguishes between "objective" certainty and "subjective" certainty as early as the Prize Essay of 1764 (2:290–291). I'll discuss this passage in more detail below. "Apodictic certainty" in the lectures appears to refer to the state of being *both* objectively and subjectively certain. Here, though, I am mostly focused on the objective side.

> The propositions assented to (*die Sätze des Fürwahrhaltens*) can be empirical and the assent apodictic. (24:733)

These passages are arresting. Kant apparently told his students that *all knowledge* involves *apodictic certainty*, and then glossed that as the state of being "universally and objectively necessary (holding for all)." "Necessary" here presumably refers to the normative connection between the grounds and the assent; Kant also speaks in the 9:66 passage of our "consciousness of the necessity" of the assent. The idea, again, is that if a subject has SOG for *p*, then from a rational point of view it is *necessary* that she assent to *p*: there is no rational room for doubt. Moreover, this is not just something about her: it "holds for all" subjects who have that ground.

What is really eye-popping about these passages (at least for contemporary eyes) is that Kant seems to be saying that even when the modality of the proposition itself is *contingent* and the grounds of the assent sense-perceptual or testimonial ("merely empirical"), the assent can still be apodictically certain (and thus "necessary" given the grounds). Even the great certainty-mongerers of the past (Aristotle, Aquinas, Descartes, Locke) would not have gone this far—i.e., they would not have held that many of our empirical assents can count as apodictically certain.

A caveat: Descartes and numerous others in the tradition *do* acknowledge that we have "moral certainty" about the specific features of various objects in the external world. But moral certainty is different from and weaker than apodictic or "metaphysical" certainty. It licenses decisive action in everyday life, and is sufficient for almost everything but scientific knowledge, but the proposition could still turn out to be false, and can in principle be doubted. Here is Descartes in the *Principles of Philosophy*:

> I distinguish here two kinds of certainty. The first is called "moral": it is sufficient (*suffisante*) to regulate our actions (*moeurs*), or also so great as that [certainty] of the things regarding which we normally do not doubt, namely those that concern daily life, although we know that absolutely-speaking they could be false (*qu'elles soient fausses*).[5]

Likewise in the *Meditations*: before succumbing to skeptical doubt, the meditator points out that he can still have *moral* certainty that is sufficient for agency. And even after completing his theistic labors, the meditator says that the conviction he has gained about contingent features of external, empirical objects is sufficient for acting in the world, but much less secure than his

---

5.   This is from the 1647 French edition of Descartes's *Principles of Philosophy* 4: 205, in (Descartes 1897, IX-2, 323). For illuminating discussion of Descartes on this issue, see Perler 2009.

newfound metaphysical certainty regarding God, the soul, and the natures of things.

But Kant is not talking about this moral kind of certainty when he says that many empirical truths are certain; rather, empirical certainty is "apodictic." Indeed, one of Kant's innovations in the critical period is to reject the tradition's talk of "moral certainty" as any kind of *epistemic* state, and instead connect it to the kind of "faith" (*Glaube*) that is based on non-epistemic, *practical* grounds. This is the sort of certainty that attaches to the postulates of practical reason.[6]

The texts discussed so far have led commentators to speak with almost one infallibilist voice. Leslie Stevenson notes that "for *Wissen* Kant requires certainty," though he coyly adds that "it remains to be discussed what such certainty amounts to" (2003, 100). Lawrence Pasternack adds some psychological surmise: "Kant seems less cynical than we are today and, perhaps because of that, he thought that both knowledge *and certainty* can be won fairly easily" (2014, 56n). Eric Watkins and Marcus Willaschek quote from the same page of the Jäsche lectures to argue that a

> reason is *objectively* sufficient if it brings about certainty, i.e., "consciousness of necessity," whereas a reason is objectively insufficient if it involves the consciousness of "the possibility of the contrary" (9:66). In other words, <u>an objectively sufficient ground guarantees the truth of the judgment for which it is a ground</u>. (2020, 3207, underline added).

That last phrase is just the rejection of *Fallibilism*. But how to understand talk of "consciousness of necessity" here? They go on:

> If "consciousness of the necessity" is understood as consciousness that, given one's grounds, the judgment to which one is assenting cannot be false, then Kant's notion of knowledge, <u>by requiring objectively sufficient grounds, also requires infallibility and thus truth</u>. (2020, 3207, underline added)[7]

So, again, the necessity is a feature *not* of the proposition assented to, but of the relation between that proposition and the subject's grounds. And thus it can also characterize empirical assent.

It is worth pausing for a moment to dwell on just how strong this position is. Watkins and Willaschek are saying, first, that if you have SOG for the

---

6.   For accounts of Kant's evolution here, see Fonnesu 2011 and compare Gava 2019.

7.   Watkins and Willaschek do not distinguish between the objective sufficiency of an assent and its having sufficient objective grounds (i.e., SOG). This makes sense if you are an infallibilist, but the fallibilist tries to exploit the distinction. Truth is the extra condition—condition (iii) above—that distinguishes full objective sufficiency from merely having SOG.

assent that *the cat is on the mat*, then your assent *must* be true. Correlatively: if you have SOG, then there is no rational room for doubt. Put the other way around: if your grounds leave open even the slimmest *chance* that the "contrary" is true and the cat is not in fact on the mat, then they are not sufficient, and the assent cannot count as knowledge, even if the cat is indeed on the mat and all the other conditions (including "subjective sufficiency") are met.

Second, according to Watkins and Willaschek, Kantian knowledge requires some kind of second-order or at least self-conscious awareness: one not only must have truth-entailing reasons, but also the "consciousness that, given one's ground, the judgment to which one is assenting *cannot* be false" (ibid., my emphasis)[8] Assuming that such "consciousness" also has to be accurate and have SOG, this threatens to put a "KK" (know that you know) requirement on Kantian knowledge, and also raises the specter of a regress.[9] If this is what Watkins and Willaschek intend, then that is about as demanding an account as one can find in the tradition. And while there are some texts in which Kant does seem inclined to something like this, it would (I submit) be preferable to find another reading that is not so demanding.

B.2. Kant's Apparent Fallibilism

The lecture transcripts we've been considering were compiled by students—in some cases over many years and from different sources; predictably enough, they are something of a pastiche. Just a few pages later in Jäsche's version, we confront this claim: "With knowledge one still listens to opposed grounds" (9:72). And in a lecture from the early 1780s, Kant likewise says that "with respect to the latter [knowledge], one still listens to opposing grounds, but not with respect to practical faith" (*Bei letzterm [Wissen] hört man noch nach Gegengründen aber beym praktischen Glauben nicht* [*Pölitz*, 24:543]).

But that's puzzling: why would one listen to opposed grounds if one has *apodictic certainty*—i.e., if one has SOG that entail the truth of *p*, and a "consciousness of the necessity" of that relation? Wouldn't such certainty suffice to banish any doubt that *p* is true? Indeed, wouldn't the objective character of the certainty make it the case that there *cannot even be* opposed grounds?

---

8. This is stronger than what is supported by the passage from the *Critique* according to which knowledge requires "subjective sufficiency." Again, the latter can be read merely as the requirement that one be able to cite what one takes to be *good* grounds for an assent, without any commitment to those grounds *entailing* the truth of the assent. See Chignell 2007 and Hebbeler forthcoming.

9. Colin McLear points out (in conversation) that there might be room for a notion of subjective "taking" here that is not genuinely reflective or second-order and thus does not itself need to have SOG. It's not clear what Watkins and Willaschek have in mind by "consciousness that, given one's grounds, the judgment to which one is assenting cannot be false." But it certainly sounds quite reflective.

Earlier lecture transcripts bring out the puzzle again: Kant is reported as saying that SOG can be probabilistically connected to truth in a *less-than-maximal* way:

> [I]f the degree of truth is greater than the degree of the grounds of the opposite, then the cognition is probable. . . . With probability (*Wahrscheinlichkeit*), <u>there really is sufficient ground</u>, and this ground of truth is greater than the grounds of the opposite; it outweighs them. (*Blomberg* 24:143, underline added)

So here we have a "sufficient ground" that renders the relevant assent more probable than not. The transcript continues: "if there is even one more degree of truth on the side of . . . the ground than there is on the side of the opposite, then the cognition is no longer *ambigua* but rather probable" (ibid.). Correlatively, grounds that fail to make the assent at least 50 percent probable are "insufficient": if "there is a lesser degree of truth on the side of <u>the insufficient ground</u> than there is on the side of its opposite, then the cognition is not only uncertain, not probable, either, but even improbable" (24:144; see also *Blomberg* 24:194 and *Dohna-Wundlacken* 24:742ff., underline added).

According to some lecture transcripts, then, objective grounds count as "sufficient" (i.e., SOG) simply by rendering an assent more probable than not. If we follow Kant's usual practice and take "sufficient" to mean sufficient for *knowledge*, then the conception in these passages invokes *Fallibilism:* a subject can possess SOG for assent that p—grounds that render p "probable"—and yet p turn out to be false. Or, in the formulation above, (i) and (ii) might be satisfied, even if (iii) is not. And so there is rational room for doubt.

At the end of the paper I will list some of the attractions of endorsing *Fallibilism*—both in itself, and on Kant's behalf. A main one, though, is just that it nicely accommodates the way we use terms like "justification," "rational," and "warrant" in both ordinary and legal contexts. Suppose a bunch of trusted friends tell you that it is sunny in Kaliningrad today, the weather broadcast says the same thing, and so you form the assent that *it is sunny in Kaliningrad today*. The assent is justified: given your evidence, you are warranted in forming it. But suppose that in this case it turns out that you're surrounded, unbeknownst to you, by people who are either mistaken or lying about the weather in Kaliningrad (perhaps in an effort to convince you to locate a Kant Congress there), and the weather broadcast just happens to be wrong today too.

Intuitively, in each of these cases you have *the same* grounds, the *same kind and amount of epistemic justification, warrant, evidence*. After all, the testimony of others, especially weather broadcasters, gives assents about the weather a high objective probability of being true. In the second case, how-

ever, it is false, and so you don't have knowledge. But you are equally epistemically justified/rational/warranted. This is an attractive picture, one that I think philosophers should abandon with reluctance.[10]

Since the regnant infallibilism in the commentary literature is at least partly motivated by texts that associate SOG with *certainty*, in what follows I will offer four models of certainty in Kant that allow us to handle those texts and yet remain fallibilist interpreters. I'm not going to claim that every text can be accounted for in a fully satisfactory way, but that's just par for the course: textual ambiguity like this confronts Kantians all the time—it's part of what keeps us in business. At such junctures, charity dictates that we look for broad coherence among a good number of texts while also considering issues of fit with other key doctrines as well as overall appeal and cogency. Before turning to that project, however, it will be useful to consider John Locke's patently infallibilist picture.

C. LOCKEAN INFALLIBILISM

Locke associates or even equates knowledge with certainty, saying in a letter to Bishop Stillingfleet that

> with me to know, and to be certain, is the same thing; what I know, that I am certain of; and what I am certain of, that I know. What reaches to knowledge, I think may be called certainty; and what comes short of certainty, I think cannot be called knowledge. (Locke 1978, *Works* vol 3, 145)
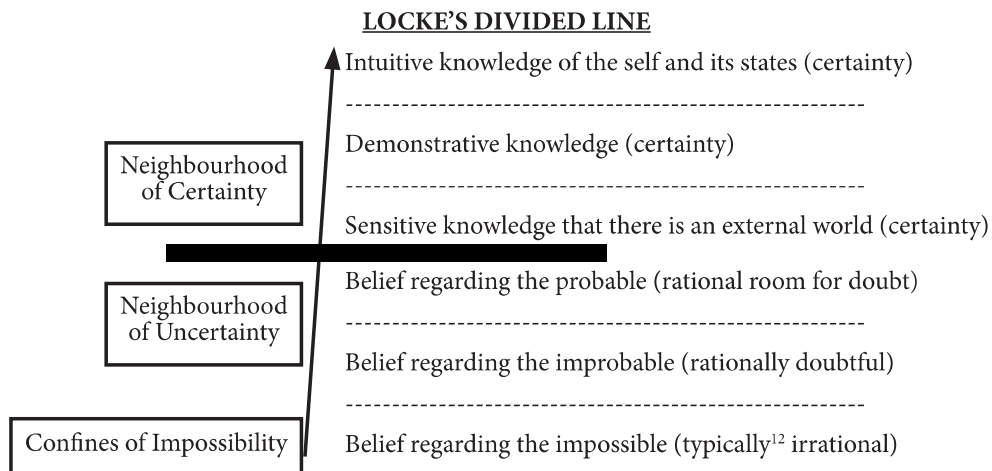
Although certainty is sometimes spoken of as a property that an attitude has or lacks *simpliciter*, it turns out that for Locke it admits of degrees. The highest degree of certainty is enjoyed by *intuitive knowledge*—knowledge of the self and its present states that is gained through direct acquaintance. Lesser degrees of certainty fall below this highest level on a kind of continuum. Below intuitive is *demonstrative knowledge*—i.e., knowledge that involves the perception of agreement and disagreement between ideas as well as the *memory* of previous steps in an argument (see Locke 1975, *Essay* IV, i, 9 and IV, ii, 4).[11]

---

10. Though many have, of course. Infallibilism (often accompanied by "knowledge-first" or disjunctivist commitments) seems to be making a comeback in recent epistemology, as well as in the interpretation of Kant. See for instance McDowell 1996, Kern 2017, and Kern's contribution to the present edition.

11. Note that unlike Kant, Locke reserves the term "assent" for the "Faculty of Mind" which takes up a positive stance towards a proposition when the subject does *not* have certainty-producing evidence. He thus equates assent with "faith," "belief," and "opinion" (Locke 1690 [1975], IV.xv.2–3). This suggests that "assent" may not have been the best translation for the German tradition's "*Fürwahrhalten*," although it is now standard, and I continue to use it here.

Below demonstrative knowledge is the very general sensitive knowledge that *there is something external that causes our sensory ideas.*

Below these various kinds of knowledge with their decreasing degrees of certainty, but on the same continuum, come merely "probable" and "improbable" beliefs—"there being Degrees herein, from the very Neighbourhood of Certainty and Demonstration, quite down to Improbability and Unlikeliness, even to the confines of Impossibility" (Locke 1975, *Essay* IV, xv, 2). So for Locke there is a "Neighborhood" at the top of the scale in which different kinds of attitudes all count as both certain and known. Below that, though, are the regions of uncertainty—and this is where we find most of our empirical beliefs. The picture can be diagrammed as follows:

LOCKE'S DIVIDED LINE

Intuitive knowledge of the self and its states (certainty)

Demonstrative knowledge (certainty)

Sensitive knowledge that there is an external world (certainty)

Belief regarding the probable (rational room for doubt)

Belief regarding the improbable (rationally doubtful)

Belief regarding the impossible (typically[12] irrational)

Neighbourhood of Certainty

Neighbourhood of Uncertainty

Confines of Impossibility

The progression from bottom to top here represents increasing degrees of objective evidence. But it is also a scale of what one's subjective confidence ought to be, since Locke endorses the principle that a subject's degree of confidence ought to be proportioned to the degree of her objective evidence. The major bold-line horizontal division falls between states that are certain (and count as knowledge), and those that aren't and don't.

Locke's picture offers some clues as to how we might interpret Kant. The latter, too, speaks of different kinds and degrees of certainty, and like Locke he includes in the set of propositions that can be certain everything from mathematical axioms to philosophical demonstrations. Kant's great departure from the Lockean tradition consists in throwing open the gates of the Neighbourhood by extending "apodictic certainty" about the empirical world *well* beyond the claim that *there is something external that causes our sensory ideas.* My suggestion is that the best way to interpret what I will call

---

12.   The exception cases here would be miracles: these are "impossible" in some narrow, causal sense, but Locke still thinks they can sometimes be the object of rational belief.

the critical Kant's "great departure" from the tradition involves allowing that he also forged his own way on the question of infallibilism.

D. KANT ON RATIONAL AND EMPIRICAL CERTAINTY

Kant distinguishes between degrees of objective, metaphysical certainty (i.e., the truth-conduciveness of an assent's objective grounds) and degrees of subjective, psychological certainty (i.e., the firmness with which it is held). We see this in the section on "Certainty" in the Prize Essay of 1764:

> One is certain (*gewiss*) if one cognizes (*erkennt*) that it is impossible that a cognition should be false. The degree of this certainty, taken objectively, depends upon the sufficiency in the characteristic marks of the necessity of a truth. But taken subjectively, the degree of certainty increases when the cognition of this necessity has more intuition (*in so fern er aber subjective betrachtet wird, so ist er in so fern größer, als die Erkenntniß dieser Nothwendigkeit mehr Anschauung hat*). In both respects, mathematical certainty is of a different kind to philosophical certainty. (2:290–291)

In the first sentence here Kant provides the traditional conception of (metaphysical) certainty: it is the kind of certainty enjoyed by cognitions that *cannot* be false. The objective "degree" of certainty depends on the "sufficiency in the characteristic marks of the necessity of a truth." This is a tricky phrase, but it suggests that such certainty is a function of the strength of the objective grounds—i.e., of how close to being "necessary" the grounds render the proposition.

Subjective certainty, by contrast, is a function of how much "intuition" one has of the strength (degree of "necessity") of the grounds. So in this early text it looks like Kant hews to tradition in holding that mathematical (intuitive) certainty is of a different and at least subjectively "clearer" kind than philosophical (discursive) certainty. Thus the former is preferable to the latter.

In logic lectures from the critical period, Kant departs in two key ways from the tradition, and from his earlier self. In this context he typically starts with *rational certainty*—this is the kind of certainty that characterizes assent that is grounded on *a priori* philosophical or mathematical reasoning. As a result, the objects of rationally certain assent are all necessary truths. Rational certainty is either "intuitive" or "discursive."[13] *Intuitive rational certainty*

---

13. Kant sometimes refers to "intuitive" rational certainty as "mathematical certainty" and to "demonstrative" rational certainty as "philosophical certainty." "Intuitive" here has to do with the justifying grounds of the assent. An *a priori* philosophical argument is not "based in intuition" in the same way as a mathematical proof is, since although some of our philosophical proofs involve concepts with intuitional content, and even sometimes appeal to the

attaches only to mathematical assents—they are "clearer" or more "evident" than philosophical assents because we directly intuit mathematical objects as we "construct" them in pure intuition (9:70–71). We just see that our mathematical assents are necessarily true by constructing *a priori* figures in pure intuition that exemplify the "universal *in individuo*" and thus ground assents that are, if true, necessarily so.

Discursive rational certainty, on the other hand, attaches to assents acquired through conceptual analysis (analytic *a priori* assents) or philosophical argument (synthetic *a priori* assents). Such assents are rationally certain but not "seen" in the same way that mathematical assents are: they involve concepts that we cannot construct in pure intuition, or transcendentally-deduced principles that are secure but very complicated—and certainly not transparent objects of synchronic mental acquaintance.

These two species of rational certainty—intuitive and discursive—are indeed "different in kind," Kant says, but—and this is his minor departure from the tradition (and his earlier self)—they are still "equally certain" (9:71).[14] So analytical/philosophical certainty is less intuitive but *equally certain*. (I will return to this minor departure in section E.3.)

But then the great departure: the critical doctrine of *empirical certainty*. For Locke, as we have seen, the only attitudes about the empirical world that are in the Neighbourhood of Certainty are general beliefs about the external *cause* of sensory ideas. These are obtained through some kind of mind-world inference and the degree of their certainty is lower than that enjoyed by other kinds of knowledge.[15] Kant departs from this when he claims that many of the assents about specific features of appearances that we acquire through empirical experience and/or testimony count as knowledge. In the third *Critique*, he explicitly lists among the "knowable" (*scibile*) not just mathematical and introspective facts but also "facts . . . about things, or their properties, which can be established by means of experience (one's own experience or the experience of others, by means of testimony)" (5:467–468). These too achieve a kind of certainty. The certainty is

> original-empirical (*originarie empirica*) insofar as I become certain of something *from my own* experience, and derived-empirical (*derivative empirica*) insofar as I become certain through *someone else's* experience. The latter is also usually called *historical* certainty. (9:71)

conditions of the possibility of all intuitional experience, they do not themselves appeal to particular intuitions as part of their grounds.

14.   For one of Kant's most detailed discussions of the intuitive/discursive distinction see 24:893–894.

15.   Cf. Locke 1975 IV,ii,14 and IV,xi 9.

Thus in the first *Critique* he can speak of the "certainty of experiential cognition" (A39/56).

In a tip of the hat to the tradition, Kant does note that such empirical certainty ranks below rational certainty somehow: "we cannot have rational certainty of everything, but where we can have it, we must put it before empirical certainty" (9:71). Still, as we saw earlier, his students quote him as saying that empirical certainty, too, is "apodictic."

I regard Kant's willingness to ascribe positive epistemic status to a wide range of empirical assents is a forward-looking and welcome challenge to Lockean tradition. But the fact that he calls it "certainty" and not just "knowledge," as we have seen, is a stumbling block to those who would like to read him as a fallibilist. This is a result, I think, of the dominance of the Lockean way of thinking about the distinction between the certain and the uncertain—a way of thinking that we still find in recent authors (like Unger 1975) who reserve the term "certain" for *indubitable* and secure beliefs and say that most (if not all[16]) empirical beliefs do not achieve it. (Unger also thinks that all knowledge has to be certain, and is thus an infallibilist, and a skeptic). Can Kant's comments about the relationship between knowledge and certainty really fit into an account that says that knowledge of *p* can be based in objective grounds that merely render *p* more probable than not?

E. FOUR MODELS OF KANTIAN FALLIBILISM

There are at least four ways, I submit, in which they can.

E.1. Model 1: Communal Certainty

Model 1 says that when Kant assimilates knowledge and certainty, he is thinking less about individual knowers and more about the *communal project of scientific knowledge-production*. This body of shared scientific knowledge is ideally stable and inalterable, and so (in the words of the *Metaphysical Foundations of Natural Science*) "scientific knowledge proper (*eigentliche Wissenschaft*)" has to be fully systematized and apodictically certain, even if "knowledge improperly-so-called (*uneigentlich so genanntes Wissen*)" does not (4:468). Such epistemic communalism is more typical of the nineteenth century (Herbert Spencer, John Stuart Mill, and W. K. Clifford), but some of Kant's lectures and writings seem to anticipate this kind of we're-all-in-this-

---

16.   Some philosophers, especially those in the Wittgensteinian tradition, will allow that some empirical beliefs—about the state of one's own mind, or about one's name—achieve a kind of certainty. Some will even allow that some testimonial beliefs can achieve the maximal degree of epistemic justification (that my name is 'Chignell' might be one such). But almost everyone will agree that *most* empirical beliefs—from one's own experience as well as from testimony—do not achieve such a maximal status.

together scientific project. He refers in the *Critique* to the "sum total of experience" or "universal experience" as a kind of *aggregate* of all the experiences we discursive finite beings could have. In the logic lectures he speaks of the communal project of bringing such experiential cognition to certainty:

> Now we have theoretical cognitions (of the sensible) in which we
> can come to certainty, and in regard to everything that we can call
> human cognition this latter must be possible. (9:67n)

And of course there is the passage from the Canon with which we started, according to which "objective sufficiency" is equated with "*certainty* (for everyone) (A822/B850)."

Model 1, then, says that any knowledge grounded in experiential cognition is *able* to be brought to full certainty, and so we can already go ahead and *say* that this unsystematic knowledge is "certain." There are different ways of elaborating this model—some more radical than others. The least radical version would paint a collaborative picture according to which the collective search for truth and the social norms for confirmation and shareability allow us to expand and refine the storehouse of certain science. Kant seems to be describing this when he says that

> it is through objections that certainty is brought to distinctness
> and completeness, and no one can be certain of a thing unless
> opposing grounds have been stirred up, through which it can be
> determined how far one still is from certainty or how close one is
> to it. (9:83)

But there are other versions of Model 1 that don't involve the actual exchange of information and objections. Suppose that two subjects have different SOG for holding that *Julius Caesar crossed the Rubicon at such-and-such a place-time,* and each would properly cite their SOG on reflection. If the proposition is true, then on the present model they both count as having knowledge. The first, however, has maximally strong grounds that give the assent a probability of 1: she's a physicist who deduces the assent from her knowledge of deterministic laws and the antecedent conditions, and thus knows that Caesar was determined to cross at just that time and place. The second subject has grounds that license *some degree* of confidence, but not certainty: he is relying on mere historical testimony. This second version of Model 1 says that *because* the first subject knows with certainty, we can also say that the second subject has not only knowledge but certainty.

A more radical version of Model 1 would say that if a given empirical content will become 100 percent certain for someone at some point—even if *no one* is presently certain of it—then *any* knowledge involving that content

can be called "certain" even now. This is more radical because it allows us to call "certain" an item of knowledge that hasn't yet achieved certainty for anyone. An even *more* radical version of Model 1 would say that even if no one ever *actually* achieves 100 percent certainty about some empirical claim, as long as someone *could in principle* do so, then we can call it "certain" for everyone.

Despite having some textual basis, this communal way of preserving a kind of fallibilism strikes me as unpromising, especially in its more radical forms. It is strange to say, for instance, that when I reasonably take someone's word for it that *p* is true, my assent that *p* counts as *certain* (rather than as probabilistic assent based on testimony) just because *the person who told me is certain*. It is even stranger to say that *my* assent that it is raining in Kaliningrad today counts as *certain* just because someone else *could* deduce this with certainty from knowledge of the deterministic causal laws and the antecedent conditions. Despite his occasional invocation of the communal character of knowledge and the systematic, stable character of true *Wissenschaft*, Kant doesn't indicate much sympathy for this radical a social vision of epistemology.

There are also some textual disadvantages. Although Model 1 does cohere with some of the passages cited above, such as the one in the Canon where Kant abstractly associates knowledge with "certainty (for everyone)," it is hard to see how it could help with the more individualist-sounding passages from the lectures:

> To know something, however, is nothing other than to cognize it with certainty. (24:241–242)

> *To know* is to judge something and hold it to be true with certainty. (24:148)

> What I *know*, finally, I hold to be *apodictically certain*, i.e., to be universally and objectively necessary (holding for all), even granted that the object to which this certain assent relates should be a merely empirical truth. (9:66)

These formulations indicate that the *actual, individual subject* achieves knowledge just in case *that subject's assents* achieve some kind of certainty. The fact that some other, or later, or merely possible participant in the communal project might be certain of the proposition doesn't seem to play a role.

E.2. Model 2: Knowledge "Approximates" Certainty

The second model abandons the idea that *all* knowledge is certain, and instead construes certainty as *an ideal that all our knowledge approximates to*

some degree. We saw that Locke, in his letter to Stillingfleet, equates knowledge with certainty, or at least links them tightly together. Despite that, Locke still allows that there are some forms of knowledge that are *higher* than others, and that sensitive knowledge just barely makes it above the epistemic borderline into the Neighbourhood of Certainty. It sounds odd to say that knowledge comes in degrees,[17] but presumably what Locke means is that our evidence, as well as our subjective confidence on the basis of it, come in degrees of strength.

Kant's view, according to Model 2, keeps the ideal of certainty at the top, as well as the thought that objective grounds come in degrees of strength. But unlike Locke, Kant (on this model) allows there to be some knowledge that doesn't achieve certainty, but rather just *approximates* it. The Jäsche transcripts report him talking about "the probable, which is to be regarded as an approximation to certainty" (9:81). Assents based on "probable" grounds (i.e., grounds that make an assent more probable than not) approximate certainty, and perhaps *could* be brought to certainty with a bit more evidence, but at the moment they don't achieve it. Still, on this model, grounds on which an assent is objectively probable count as "sufficient" for knowledge. In short, according to Model 2 Kant agrees with Locke that there is a range of different kinds of certainty at the top, but he also allows (as Locke would not) that (a) some of our specific empirical knowledge from sense-perception and testimony makes it into the Neighbourhood of Certainty, and (b) some of our other probabilistic empirical knowledge at least approximates certainty. This is why, speaking loosely, we can call all knowledge "certainty (for everyone)."

If Model 2 accurately captures Kant's view, he doesn't provide much help with the details: in particular, there is no talk of where on the scale of probability an assertion has to fall (given one's evidence) in order for the resulting assent to count as knowledge. But this is a problem for most forms of fallibilism. Laurence Bonjour sarcastically calls it "the magic point" and describes the problem this way:

> [I]t is surely not good enough to say merely, as is commonly said, that the level of justification in question is "strong" or "high" or "adequate" or enough to make it "highly likely" that the belief in question is true, for nothing this vague is enough to specify a definite level of justification and a corresponding definite concept of knowledge. (2011, 60)
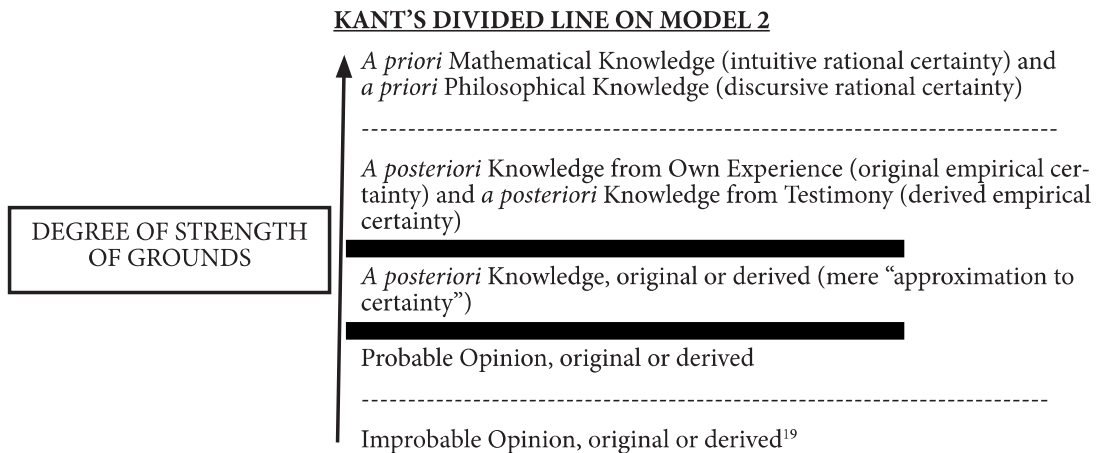
Whether or not it is "good enough," it's true that any fallibilist picture is going to have to specify a quantitative or qualitative difference between "sufficient" and "insufficient," or just live with some vagueness here. Where does justifi-

---

17. Although Stephen Hetherington (2001) is willing to say it.

cation (or SOG) full-stop begin? And is the threshold different in different contexts?

Earlier we saw that Kant sometimes indicates that "more probable than not" is the precise point, but he could also go with something vague like "comfortably more than .5 probability" (see Chignell 2007). The vagueness can be an advantage: Conee and Feldman defend a fallibilistic form of evidentialism and are happy to say, about Bonjour's magic point, that "there is no conspicuously correct fact of this matter" (2004, 296).[18]

Either way, on this model it's clear that opinion (*Meinung*) is at the bottom—opinion is assent that transparently lacks sufficient objective grounds, but may in some circumstances be held with a low degree of confidence. Above opinion (and its very important species, *hypothesis*) is an array of empirical assents that have objective grounds sufficient to count as knowledge, and can rationally be held with a greater degree of confidence than opinions, but not with full-blown certainty. Still higher is the gamut of empirical assents that have such strong grounds that they count as *empirically certain* in either the original or the derived way. And above these are assents that have maximally strong *a priori* grounds and thus enjoy one of the two types of *rational certainty*—intuitive and discursive. Here it is in a diagram:

KANT'S DIVIDED LINE ON MODEL 2

A priori Mathematical Knowledge (intuitive rational certainty) and *a priori* Philosophical Knowledge (discursive rational certainty)

A posteriori Knowledge from Own Experience (original empirical certainty) and *a posteriori* Knowledge from Testimony (derived empirical certainty)

A posteriori Knowledge, original or derived (mere "approximation to certainty")

Probable Opinion, original or derived

Improbable Opinion, original or derived[19]

DEGREE OF STRENGTH OF GROUNDS

---

18.   This passage is cited by Michael Hannon (2014) who goes on to recommend as superior a "qualitative" distinction between what is epistemically justified and unjustified on a fallibilist picture. For Hannon (following Edward Craig), a justified assent has to meet what he calls the "Reliable Informant Criterion": "The level of justification needed for knowledge is that which puts the agent in a strong enough epistemic position for her to fittingly serve as a reliable source of actionable information for members of her epistemic community, many of whom have diverse projects, purposes, and interests" (1128). Kant doesn't say anything like this, of course, but the idea would fit generally with his principle that the "practical has primacy" over the theoretical.

19.   Unlike Locke, Kant does not explicitly include assent to "impossibilities" on the continuum, though presumably he would allow the assent *that* they are impossible. It is controversial whether Kant can accommodate a doctrine of miracles in his philosophy, although

Each horizontal line demarcates a new grade of certainty: thus the two kinds of *a priori* knowledge are "equally certain" (as Kant says at 9:71 and 24:735—again, revising his view from 1764) and they are both *more certain* than two kinds of *a posteriori* knowledge. The upper bold line is the one that divides assents that enjoy certainty from those that don't. The lower bold line is the one that divides assents that count as knowledge from those that don't. So there is a middle category of assent that has probabilistic grounds that are sufficient for knowledge, and "approximate certainty," but are not strong enough to provide genuine certainty.[20]

The main disadvantage for this model is textual: we have to admit that at least some empirical knowledge is *not* certain after all, even though it is probable and "the probable is . . . an approximation to certainty."

E.3. Model 3: Certainty as Awareness of Inalterability

The third way in which we could accept what Kant says about certainty but still salvage SOG-fallibilism is by construing knowledge as "certain" just insofar as its *"opposing grounds" will never rise to a destabilizing level*. Consider this passage from some critical metaphysics lectures:

> In every science, if we abstract from the amount of knowledge, the essential aim is that it be distinguished from mere opinion, thus [the essential aim is] certainty. The method that one uses in the sciences is merely the means to reach this end. <u>Certainty is the inalterability of an assertion of truth.</u> An assertion of truth is inalterable either objectively, if we know that no more weighty ground for its opposite is possible in itself, or subjectively, if we are convinced that neither we ourselves nor any other person <u>will ever be in possession of greater grounds for the opposite</u>. (*Metaphysics L2*, 18:288, my emphasis)

Kant reportedly said that the aim of science is to generate secure, inalterable bodies of knowledge, and that this involves keeping mere opinions and hypotheses clearly distinct from them. Kant glosses this "essential aim" as the aim for certainty, but then immediately characterizes it in a way that sounds compatible with being merely probabilistic. We are certain if "no more weighty ground for its opposite is possible": our evidence need not support *p* with probability 1; it just has to make it such that there's no way the evidence

---

for an argument that he can, see Chignell 2014.

20.   Here the relevant variable is the degree of strength of objective grounds, and the subjective sufficiency condition for knowledge is met. Cases in which the two come apart such that the subject's psychological firmness outstrips the degree that is licensed by the objective grounds count as what Kant calls "persuasion" (*Überredung*).

for *not-p* could outweigh it. And this is compatible, of course, with *p*'s turning out to be false.

Likewise, Kant says here that we are subjectively certain if we are "convinced" that no one (including ourselves) is going to find better evidence for *not-p* than we have for *p*. But this too is compatible with thinking that there is *some* weight to the opposing ground, and thus that the assertion is *not* metaphysically certain in the sense of being 100 percent probable.

It is hard to pin down the direct lineage, but these aspects of Kant's views on certainty may have been taken from the Leipzig tradition of "qualitative probability" that was promoted by Kant's influential predecessor Christian A. Crusius. Crusius presumably inherited it from Andreas Rüdiger (1673–1731), in whose thought Friedrich Müller (1684–1761), and his own teacher Adolph Friedrich Hoffman (1707–1741) were trained.[21] Müller articulates precisely this contrastive, inalterability conception of certainty in his *Introduction to the Philosophical Sciences* (1733),[22] and Crusius reiterates it in passages like this:

> From this one can see why probable propositions (*wahrscheinliche Sätze*), and those that can be cognized through the cognitive way of probability (*und solche, welche durch den Erkenntnisweg der Wahrscheinlichkeit erkannt werden*), should not be seen as at a disadvangage. . . . For these latter can also be completely certain (*Denn die letzteren können auch völlig gewiss seyn*); on the contrary, one should take care to understand as a probable proposition one that has a massive degree of probability (*einen mässigen Grad der Wahrscheinlichkeit hat*). (1747, 732–733)[23]

We find the same conception at work in Crusius's *Metaphysics*:

> For certainty is merely something in the understanding; the necessity however is something in the constitution of the thing itself. We cognize something as certain, when we have insight into stable grounds such that we will have no further cause to fear that our thoughts, which we take from the thing, deceive, whether the thing itself be necessary or contingent (*wenn wir sichere Gründe einsehen, um welcher willen wir nicht weiter zu befürchten Ursache haben, dass unsere Gedanken, welche wir von der Sache hegen, be-*

---

21. For a very helpful survey of this tradition, see Spoerhase (2009).

22. Müller says that we have to distinguish between mathematical/metaphysical certainty and the "probability" involved in "physical truths." For Müller, the physical truths are put into a class between that which is "entirely certain" (*gäntzlicher Gewissheiten*) and that which is "entirely uncertain, or merely possible" (*gäntzlicher ungewissheitern, oder blosser Möglichkeiten*) (1733, 561, qtd. in Spoerhase 2009).

23. Cf. Spoerhase 2009 here, pp. 280ff. Spoerhase's article was very useful to me in thinking about this third model.

> *trügen, die Sache selbest mag notwendig oder zufällig seyn*). (Crusius, 1745, section 17)

So for Crusius, there is the "certainty of demonstration," but then there is the certainty of an endless series of probabilities (*Gewissheit einer unendlichen Menge von Wahrscheinlichkeiten*) which is "equivalent to a geometrical demonstration of it" (*denen geometrischen Demonstrationen gleich*) (1747, 357). This would be a truly bizarre claim, unless we interpret "certainty" as inalterability along the lines of the present model.

We saw earlier that in the Prize essay of 1764—within the section on the different kinds of certainty—Kant articulates the traditional thesis that philosophical knowledge is held with a lower "degree of assurance" than mathematical knowledge because it has less by way of clarity. The key thing to emphasize here, though, is that Kant *also* says that "the grounds for supposing that one could not have erred in a philosophical cognition *which is certain* can never be as strong as those which present themselves in mathematics" (2:292, my emphasis). This indicates that in the mid-1760s, anyway, Kant had already adopted the Leipzig-*Schule*'s position that some kinds of "certainty" are consistent with the possibility of error—an altogether fallibilist conception. Later on in the critical period, as we have seen, he embraced Crusius's idea that non-mathematical certainty can equal mathematical certainty in strength and stability (this is the first "departure" discussed above).

We also find fallibilism about testimonial assent in a key Reflection dated to summer 1785. Kant says there that much of history is scientific—a "*wahre Wissenschaft*"—and that historical testimony can justify an "objectively immutable" assent. But this is because "it is impossible to admit sufficient grounds for the opposite [proposition]" (18: 288.33–289.01). Kant's idea seems to be that there *may* well be grounds that support the opposite (i.e., testimonial sources that somehow speak for *not-p*), but they won't ever be strong enough to force us to revise our assent that *p*.[24]

This model is attractive, but it admittedly struggles with texts like those cited above in which Kant says that "with knowledge one still listens to opposed grounds" (9:72; see also 24:543). If having knowledge (and thus being certain) involves being sure that opposing grounds will never rise to a destabilizing level, then it is not clear why we would still "listen" to them.[25] Fallibilists do not say that everything can reasonably be doubted by the sub-

---

24. Thanks to Marco Santi for drawing my attention to this Reflexion, which Erich Adickes regarded as so polished and articulate that Kant may have been preparing it for publication, perhaps in the *Berlinische Monatsschrift*.
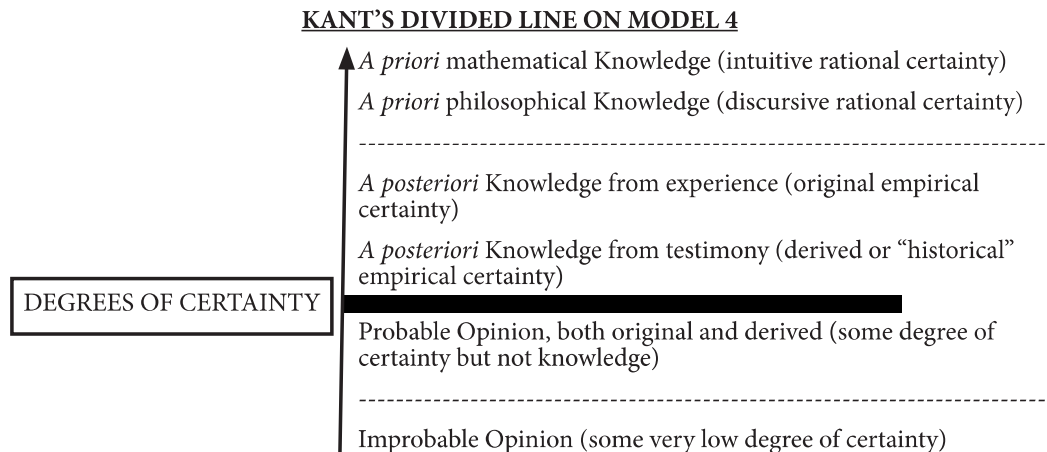
25. It would be worth thinking about what Kant says here in the context of Kripke's paradox of dogmatism, something I hope to do elsewhere.

ject—since there will be many cases in which our grounds are strong enough that we can feel quite confident in the "inalterability" of our views. But fallibilists do typically want to say that listening to counterevidence that arises ("opposing grounds") can be appropriate, since there is always some rational room for error, even when an assent has SOG.

E.4. Model 4: Certainty All the Way Down?

The fourth and final model expands on the idea that certainty comes in degrees to the point where we might think *certainty itself, like probability, goes all the way down*. Knowledge involves certainty of a moderate-to-high degree—let's call anything over this level "epistemic certainty"—and yet almost any assent will enjoy *some* degree of certainty by way of enjoying some degree of probability. Thus, hypotheses and other items of opinion have *some* degree of certainty, though not the level sufficient for knowledge.

The Dohna-Wundlacken transcripts from the critical period report Kant as saying that probability "lies on the way to certainty and produces certainty increasingly through homogeneous grounds" (24:743). Here it sounds like "certainty" is being used in two ways—both to refer to the full-blown epistemic notion and to refer to the degree of certainty that is increased as we get better and better probabilistic grounds. So this is an excellent text for Model 4: it depicts Kant as simply extending the Lockean "degrees of certainty" picture all the way down below the divided line. A "degree of certainty" is then just a degree of probability.

KANT'S DIVIDED LINE ON MODEL 4

A priori mathematical Knowledge (intuitive rational certainty)

A priori philosophical Knowledge (discursive rational certainty)

A posteriori Knowledge from experience (original empirical certainty)

A posteriori Knowledge from testimony (derived or "historical" empirical certainty)

DEGREES OF CERTAINTY

Probable Opinion, both original and derived (some degree of certainty but not knowledge)

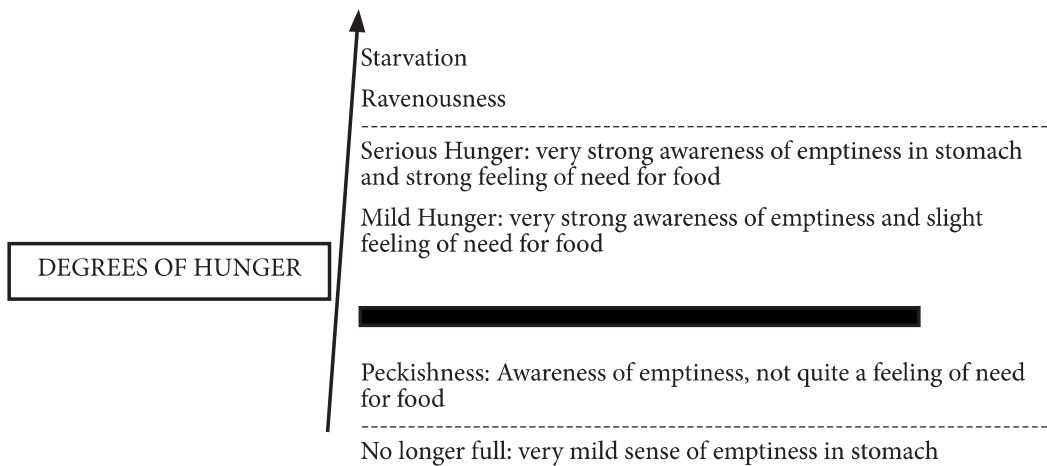Improbable Opinion (some very low degree of certainty)

Each horizontal line demarcates a new grade: the two kinds of *a priori* knowledge are "equally certain" and they are both *more certain* than two kinds of *a posteriori* knowledge. The bold line divides assents that enjoy epistemic certainty from those that don't, even though the opinions below the line have a *degree* of certainty.

It may sound odd to think that even mere opinion counts as having some degree of certainty, and that there is then a line (the bold line above) at which *epistemic* certainty (the kind of certainty associated with genuine knowledge) appears. But we can think of analogues. The first is also from the Jäsche lectures. Kant provides a list of the "degrees of cognition" but then makes it clear that the first few degrees do not count as cognition proper. That starts at the fourth degree:

> The *fourth [degree of cognition]*: to be acquainted with something *with consciousness*, i.e., to *cognize* [*erkennen*] it (*cognoscere*). Animals are *acquainted* with objects too, but they do not *cognize* them. (9:64–65)

And there are degrees above the fourth that count as cognition proper, with additional bells and whistles (understand, insight, comprehension, etc.).

An analogue from the everyday would be the following list of the degrees of hunger. There's a sense in which a very mild sense of emptiness in the stomach *is* hunger in the first degree. But we might think that hunger *proper* doesn't start till further up the scale (over the bold line):

Starvation

Ravenousness

Serious Hunger: very strong awareness of emptiness in stomach and strong feeling of need for food

Mild Hunger: very strong awareness of emptiness and slight feeling of need for food

DEGREES OF HUNGER

▬▬▬▬▬▬▬▬▬▬▬▬

Peckishness: Awareness of emptiness, not quite a feeling of need for food

----

No longer full: very mild sense of emptiness in stomach

This model also makes sense of the very first fallibilist passage I presented, the one that says that with "knowledge one still listens to opposed grounds" (9:72). Lawrence Pasternack argues that this passage does not provide support for fallibilism, because we have to read it "in the context of a later passage" (2014, 57n), which turns out to be a full eleven pages later in the Jäsche logic:

> For it is through objections that certainty is brought to distinctness and completeness, and no one can be certain of a thing unless opposing grounds have been stirred up, through which it can be determined how far one still is from certainty or how close one is to it. Also, it is not enough merely to answer each doubt, one must

> also *resolve* it, that is, make it comprehensible how the scruple has
> arisen. (9:83; see also *Pölitz*, 24:556; *Dohna-W*, 24:743)

To my eyes, however, this passage too seems compatible with a fallibilist picture. Kant says that one can have a degree of certainty (and thus knowledge) before inquiry is complete, but that it may be brought to an even higher degree (of distinctness and completeness) through the process of examining all the remaining opposed grounds or scruples and trying to "resolve" them. Lower degrees of certainty, then, are compatible with there being some opposed grounds—and with the assent turning out to be false.

Consider a similar passage from an earlier lecture, in which "certainty" is explicitly characterized as leaving rational room for doubt:

> Frequently we can have complete certainty of this or that thing,
> but the grounds of the certainty are frequently such that one still
> notices much uncertainty in the mode of inferring . . . every uncertainty is a ground for a legitimate doubt, since I still find it possible
> to search for grounds for the opposite of the cognition. (24: 203)

A subject can be *aware* that there is reason to doubt even something that she holds "with complete certainty." The "complete" is a bit infelicitous—it can't mean *perfect* or *absolute* or 100 percent certainty, presumably. But it might mean what I've been calling "epistemic certainty"—the stage along the way in which she counts as having certainty sufficient for knowledge, but still not the highest level.

A variation on this model would construe (objective) certainty entirely externalistically—it is determined by facts about objective grounds and the relation between those grounds and the subject's assent. A subject could have this kind of certainty and yet still (from an internal point of view) feel the need to inquire further into "the mode of inferring" and so on—perhaps she could even suspect that there are reasons to doubt. Thus certainty would still leave rational room for doubt.[26]

Either way, however, these passages undermine the assumption that just because Kant talks of certainty he must be wedded to an infallibilist picture.[27]

---

26. Thanks to Yuval Avnur for suggesting this variation, and to Silvia De Toffoli and Giacomo Melis for discussion.

27. Pasternack (2011, 2014) makes this assumption, and cites Leslie Stevenson in support. Interestingly, though, Stevenson himself says that although "for *Wissen* Kant requires certainty" but that "it remains to be discussed what such certainty amounts to" (2003, 100). This seems compatible with a fallibilist model of certainty.

122 Andrew Chignell

F. FALLIBILISM'S ATTRACTIONS

We have now seen how dramatically at least some of what Kant says about certainty and doubt differs from the early modern infallibilist tradition. We have also considered four models that accommodate what he says about the relationship between knowledge and certainty without giving up fallibilism. Although, I didn't plump for one over the other, I tend to think that some combination of Model 3 and Model 4 is the best characterization of Kant's considered view, and hope to continue the defense of that elsewhere.

By way of conclusion, however, it is worth asking: what hangs on all of this? Why, apart from just trying to do our best to discern an important philosopher's view, should we care whether Kant turns out to be a fallibilist or an infallibilist about SOG? As we have seen, although there are some infallibilists in the contemporary literature, most epistemologists seem to agree that it is deeply commonsensical to think of knowledge this way, and that it reflects the way we use terms like "justification," "warrant," and "sufficient evidence" in many ordinary and legal contexts.[28] But here are some more specific considerations:

> 1. Reading Kant as a fallibilist allows us to depict him as a forward-looking vanguard member of a new epistemological tradition that comes with the introduction of probability theory and the rise of the empirical sciences. This tradition rejects the old Greek-scholastic-Cartesian-Lockean idea that *a priori* knowledge and/or systematic knowledge of abstract principles in a completed hierarchy is *the* standard against which all claims to knowledge must be measured.[29] That may still serve as a kind of ideal in some scientific contexts, for Kant, but there is also probabilistic but bona fide knowledge arising out of everyday perceptual contexts and experimental inquiry, as well as knowledge based in testimony and what Kant calls "common human understanding." Kant wisely accompanies this probabilistic conception of grounds with the caveat that their "weights aren't stamped, so to speak" (9:82). That is, outside of *a priori* or strictly statistical contexts, we won't be able to know precisely how objectively probable our SOG render our assent. Kant's fallibilism thus fits nicely with contemporary views according to which we don't need to be able to take the precise measure of our grounds, even when rationally basing our beliefs on them.

---

28.   Though see Pasnau 2017 for some general objections to efforts to understand the pre-modern or early modern tradition of talk about "certainty" in terms of contemporary scientific practice (or analytic epistemology).

29.   For overviews of this transition, see Pasnau 2017 and Spoerhase et al. 2009.

2. Infallibilism, by contrast, has an unattractive kind of "control freak" gatekeeping aspect to it: we only admit absolutely secure and apodictically certain assents into the storehouse of knowledge, and moreover we need to be "conscious of the necessity" that those grounds impart to the assents that we are basing on them. That kind of august, high-level *scientia* is great if you can get it, and perhaps it is the ideal for some parts of mathematics and logic. But, we tend to think, it is largely out of reach in everyday and empirical science contexts. Moreover, it is this control freak aspect gives rise to the "Enlightenment" bogeyman against which our various "post-_____" colleagues in humanities and social science departments rail. So I submit that hermeneutical charity as well as prudence recommends that Kant scholars distance our philosopher from such a view *provided* we can do so without mangling the texts and his other doctrines. That's what the models above aim to do.

3. Fallibilism allows for higher-level epistemic states in the way that Kant himself does: knowledge that becomes *more* certain by way of being explicitly fit into a systematic account of nature, for instance. Here infallibilists face a dilemma. One thing they could say is that additional features like systematicity, hierarchy, comprehensibility, etc., do *not* contribute to the sufficiency or certainty of the assent at all. In other words, such features are epistemically inert, and at most add aesthetic or economical advantages to various bodies of knowledge. The other thing they could say is that *every* piece of knowledge has to satisfy *all* of these high-level conditions in order just to count as knowledge. But, again, this makes it hard to see how we (not to mention children or the cognitively impaired) could count as having much knowledge at all, and in particular hard to see how any of our everyday empirical assents based on sense and testimony could count as knowledge in the way that Kant says. Neither of these options is very attractive, I submit, and so this is another point in favor of a fallibilist interpretation.[30]

4. Expanding on the last point: fallibilism is a crucial weapon against the skeptic. It is clear that all or at least the vast majority of our assents about

---

30.   In the Jäsche lectures Kant noted that the word *Wissen* comes from the German word for *Wissenschaft*, which he says is "a complex of cognition as a system." But as I have already noted he also points out that there is "common cognition," which is a "complex of cognition as *mere aggregate*"—i.e., that we have cognition of various "parts" of a subject-matter, even if we have not unified them under some systematizing idea of the whole (9:72–73). These items of cognition still presumably ground some sort of knowledge. It is what, in the *Metaphysical Foundations*, Kant calls "knowledge improperly so-called," whereas "scientific knowledge proper" is an apodictically certain secure part of a science (4:468). See also A832/ B860 and 9:48.

the empirical world are *not* such that it is *impossible* that they are false. In other words, it is clear that even if we are capable of absolute metaphysical certainty in some domains, most of the assents gained through sense-perception and testimony *could* turn out to be false, and thus *could* leave rational room for doubt. As Kant himself reportedly said in an early lecture, "Only mathematics and pure and immediate experience are of such a kind that they leave us no grounds for their opposite" (24:160). But according to at least some forms of infallibilism, this means that most or perhaps all of the products of sense-perception and testimony *cannot* count as knowledge, even if they are true. Such radical skepticism about the empirical world is unattractive, and not at all in the spirit of Kant's naturalistic, moderate, science-friendly approach to epistemology, or what he says about "empirical" and "historical" knowledge and certainty.[31]

5. Infallibilist readers try to resist this last point as follows:

> Empirical and historical knowledge can be infallible if, e.g., knowledge is understood along broadly disjunctivist lines. If your reason to believe that there is a red ball in front of you is that you can *see* the red ball, then this guarantees the truth of your belief, which thus amounts to knowledge. Now it may happen that you take yourself to have such a reason when in fact you do not, but this does not undermine the idea that if you *do* have such a reason, you cannot be mistaken and thus have knowledge. In this way, Kant's infallibilism about knowledge is compatible with a general acknowledgement of the fallibility of our cognitive faculties. (Watkins and Willaschek 2020, 3207)

In the last section I mentioned a variation according to which certainty is construed externalistically—determined entirely by facts that are outside the subject's purview. But Watkins and Willaschek's proposal is different. They deny that that there is any "highest common factor" between a piece of knowledge and a false assent that has sufficient objective grounds—namely, those very grounds (what they call "your reason"). Put in another way: they deny the fallibilist idea that an assent can have SOG and yet still turn out to be either true or false. There is more to say about their proposal, but in my view it would be both anachronistic and uncharitable, provided that there is any viable alternative, to marry Kant

---

31.   Jessica Brown (2018) offers an extended argument in the contemporary context for the thesis that infallibilism inexorably leads to skepticism. For the view that Kant is a moderate and not really concerned with refuting radical skepticism, see Ameriks 2003.

to this kind of disjunctivism-cum-evidential externalism—a view that is highly controversial in its own right.

6. Watkins and Willaschek also take issue with an earlier presentation of my fallibilist view in the following way:

> Chignell . . . claims (against Kant's insistence that knowledge re-quires certainty) that objectively sufficient grounds are fallible. This claim may rest on confusing fallibility in the sense that we can mistakenly take ourselves to know something (and thus to have objectively sufficient grounds) with the (for Kant incoherent) assumption that knowledge itself (and the grounds it is based on) could be fallible. (2020, 3207n)

I didn't mean to suggest that what in fact *is* knowledge can turn out to be false, since knowledge is factive. I do think, however, that for Kant having objective grounds that are *sufficient* for knowledge (i.e., having SOG) is compatible with the assent being false (that's just what *Fallibilism* says). I also think that this could be the case whether or not I take myself to have SOG—perhaps I have no reflective view on the matter at all. Again, this just seems commonplace: the universal testimony of normally reliable people, including the weather broadcasters, *is* objectively good evidence for forming an assent about the weather in Kaliningrad today. If it's true, then we know it.[32] But it might not be true.

7. A related point: fallibilism accommodates the way in which "certain" operates differently across different epistemic contexts. When asked whether I am certain that I live in a boring New Jersey suburb, I will immediately and naturally respond in the affirmative—and few peo-ple, I think, will take me to have spoken misleadingly or violated a rule. But suppose we are in a conversational context where the standards for certainty have been artificially elevated, perhaps by the use of linguistic focus—"But are you ABSOLUTELY CERTAIN that you live in central New Jersey? [pregnant pause . . .]." In this context I realize that I am be-ing asked to satisfy much stricter conditions on certainty that my assent probably doesn't satisfy, and so I hesitate. After all, there is a *chance* that I am wrong. A fallibilist "degrees of certainty" conception can account for these kinds of scenarios in a way that an infallibilist conception cannot.[33]

---

32.   Again, I'm bracketing the "subjective sufficiency" condition here and throughout. Kant does think that full warrant requires being in a position to cite our grounds, if not to say how precisely probable they render the assent. See Hebbeler, forthcoming for more discussion of this condition.

33.   I don't mean to wed Kant's view to contextualism, however—I'm just pointing out that fallibilism and contextualism can be good bedfellows. There is plenty of room for falli-

G. CONCLUSION

The question of whether to interpret Kant as a fallibilist about sufficient objective grounds (SOG) is a complex and, as a result, contested one. The texts push in a number of different interpretive directions, and there is none that is absolutely decisive. Thus we can accept Pasternack's contention that "infallibility is a standard that dominates the history of epistemology and is directly affirmed in a myriad of passages throughout the Kantian Corpus" (2014, 58–59). Here however I have sketched four fallibilist models of certainty that are textually defensible and that fit within Kant's general picture. They also, much more charitably than their alternatives, I submit, depict Kant as a forward-looking advocate of the knowledge-producing efforts of the empirical sciences—the very sciences for which his transcendental philosophy was designed to provide a foundation. They do this without ascribing newfangled disjunctivisms and externalisms to him.[34]

So while it is hard to be *certain* that Kant was a fallibilist, I think we have SOG to hold that he was one nonetheless.[35]

References

Ameriks, Karl. *Interpreting Kant's Critiques*. New York: Oxford University Press.

Brown, Jessica. 2018. *Fallibilism: Evidence and Knowledge*. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780198801771.001.0001

Chignell, Andrew. 2007. "Kant's Conceptions of Justification," *Nous* 41: 33–63. https://doi.org/10.1111/j.1468-0068.2007.00637.x

Chignell, Andrew. 2014. "Can Kantian Laws be Broken?" *Res Philosophica* 91(1): 103–121. https://doi.org/10.11612/resphil.2014.91.1.5

Crusius, Christian August. 1745. *Entwurf der nothwendigen Vernunft-Wahrheiten, wiefern sie den zufälligen entgegen gesetzet werden*. Leipzig: Gleditsch.

Crusius, Christian August. 1747. *Weg zur Gewißheit und Zuverläßigkeit der menschlichen Erkenntniß*. Leipzig: Gleditsch.

bilist invariantism or interest-relativism. Note that here, at least, I am agreeing with Pasternack when he says that "exactly what constitutes certainty according to Kant cannot readily be settled since he expressly rejects any fixed universal standard for justification and rather states that it must vary in accordance with the content under consideration (see A 59/B 83)" (2011, 293n).

34.   Except for the "variation" on Model 4 mentioned at the end of section E.4., which is externalist about certainty.

Descartes, René. 1897. *Ouevres de Descartes*, ed. Charles Adam and Paul Tannery. Paris: J. Vrin.

Fonnesu, Luca. 2011. "Kant on Moral Certainty," in *Kant und die Aufklärung*, ed. L. Cataldi Madonna and P. Rumore, 183–204. Hildesheim: Olms.

Gava, Gabriele. 2019. "Kant and Crusius on Belief and Practical Justification," *Kantian Review* 24(1): 53–75. https://doi.org/10.1017/S1369415418000523

Hannon, Michael. 2014. "Fallibilism and the Value of Knowledge," *Synthese* 191(6): 1119–1146. https://doi.org/10.1007/s11229-013-0315-z

Hebbeler, James. Forthcoming. "Reason, Reflection, and Reliabilism: Kant and the Grounds of Rational and Empirical Knowledge," in *The Court of Reason: Akten des XIII. Kant-Kongresses*, ed. Camilla Serck-Hanssen und Beatrix Himmelmann. Berlin: de Gruyter.

Hetherington, Stephen. 2001. *Good Knowledge, Bad Knowledge: On Two Dogmas of Epistemology*. New York: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199247349.001.0001

Kant, Immanuel. 1902–. *Gesammelte Schriften*. Berlin: Königlich-Preussischen Akademie der Wissenschaften zu Berlin (now de Gruyter). Works cited by Akademie volume:page. (English translations here usually differ insubstantially from those in the *Cambridge Edition of the Works of Immanuel Kant*, general editors Paul Guyer and Allen Wood [New York: Cambridge University Press, 1992–].)

Kern, Andrea. 2017. *Sources of Knowledge*, trans. D. Smyth. Cambridge, MA: Harvard University Press. https://doi.org/10.4159/9780674973947

Locke, John. 1975 (1690). *Essay Concerning Human Understanding*, ed. Peter Nidditch. Oxford: Clarendon Press. https://doi.org/10.1093/oseo/instance.00018020

Locke, John. 1978. *The Clarendon Edition of the Works of John Locke. The Correspondence of John Locke In Eight Volumes, Vol. 3: Letters Nos. 849–1241*, ed. E. S. de Beer. Oxford: Clarendon Press. https://doi.org/10.1093/actrade/9780198245605.book.1

Madonna, L. Cataldi. 1987. "Wahrscheinlichkeit und wahrscheinliches Wissen in der Philosophie von Christian Wolff," *Studia Leibnitiana* 19: 2–40.

McDowell, John. 1996. *Mind and World*. Cambridge, MA: Harvard University Press. https://doi.org/10.2307/j.ctvjghtzj

Pasnau, Robert. 2017. *After Certainty*. New York: Oxford University Press. https://doi.org/10.1093/oso/9780198801788.001.0001

Pasternack, Lawrence. 2011. "The Development and Scope of Kantian Belief: The Highest Good, the Practical Postulates and the Fact of Reason," *Kant-Studien* 102: 290–315. https://doi.org/10.1515/kant.2011.022

Pasternack, Lawrence. 2014. "Kant on Opinion: Assent, Hypothesis, and the Norms of General Applied Logic," *Kant-Studien* 105(1): 41–82. https://doi.org/10.1515/kant-2014-0003

Perler, Dominik. 2009. "Woran können wir zweifeln? Vermögensskeptizismus und unsicheres Wissen bei Descartes," in *Unsicheres Wissen: Skeptizismus und Wahrscheinlichkeit 1550–1850*, ed. Carlos Spoerhase, Dirk Werle, and Markus Wild, 43–62. Berlin: DeGruyter.

Spoerhase, Carlos. 2009. "Die 'mittelstrasse' zwischen Skeptizismus und Dogmatis-
mus: Konzeptionen hermeneutischer Wahrscheinlichkeit um 1750," in *Unsi-cheres Wissen: Skeptizismus und Wahrscheinlichkeit 1550–1850*, ed. Carlos Spo-
erhase, Dirk Werle, and Markus Wild, 269–300. Berlin: DeGruyter.
https://doi.org/10.1515/9783110214765.2.269

Unger, Peter. 1975. *Ignorance: The Case for Skepticism*. Oxford: Clarendon Press.
https://doi.org/10.1093/0198244177.001.0001

Watkins, Eric, and Marcus Willaschek. 2020. "Kant on Cognition and Knowledge,"
Synthese 197(8): 3195–3213. https://doi.org/10.1007/s11229-017-1624-4