

THE WARRANT ACCOUNT AND THE PROMINENCE OF ‘KNOW’

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ABSTRACT: Many philosophers agree that there is an epistemic norm governing action. However, they disagree on what this norm is. It has been observed that the word ‘know’ is prominent in ordinary epistemic evaluations of actions. Any opponent of the knowledge norm must provide an explanation of this fact. Gerken has recently proposed the most developed explanation. It invokes the hypothesis that, in normal contexts, knowledge-level warrant is frequently necessary and very frequently sufficient (Normal Coincidence), so that knowledge-based assessments would be a good heuristic for practical reasoning and epistemic evaluations of action. In this paper, I raise three problems for this approach. First, I argue that Normal Coincidence is ad hoc: it relies on an unsupported frequency hypothesis that we should expect to be false given the warrant account that Gerken also endorses. Second, I argue that, in any case, Normal Coincidence is insufficient to support the hypothesis that knowledge-based evaluation of action constitutes a good heuristic. Third, I consider three other hypotheses close to Normal Coincidence apparently more likely to support the heuristic hypothesis, but I argue that they seem even more ad hoc than Normal Coincidence.

KEYWORDS: norm, epistemic, action, knowledge, practical reasoning, heuristic

1. Introductory Remarks

We often say things like

- “You *knew* that p (e.g., that he is allergic to peanuts). Why didn’t you tell me?”
- “She did well to do A (e.g., to check), for she *had insufficient evidence*.”

This suggests that there is an epistemic norm governing action.¹ This norm is supposed to tell us which epistemic condition must be satisfied to rationally (or

¹ Although see Davide Fassio, “Is There an Epistemic Norm of Practical Reasoning,” *Philosophical Studies* 174, 9 (2017), for the idea that such epistemic evaluations concern regulation conditions rather than a (sui generis) epistemic norm of practical reasoning. On the distinction between norms and regulation conditions, see also Pascal Engel, “Belief and Normativity,” *Disputatio* 2, 23 (2007) and “In What Sense Is Knowledge the Norm of Assertion?” *Grazer Philosophische Studien* 77, 1 (2008).

appropriately) use a certain consideration as a reason for action.² There is no consensus on what the relevant epistemic condition is.³ Still, everybody accepts that 'know' is a prominent term of ordinary epistemic assessments of action and that this fact constitutes some evidence in favour of the knowledge account. Thus, any opponent of the knowledge account must offer a plausible explanation of it.

Mikkel Gerken, an opponent of the knowledge norm, has recently offered the most promising and developed explanation of the required sort. This explanation is based on the hypothesis that, in normal contexts, knowledge-level warrant is frequently necessary and very frequently sufficient for action (Normal

² The supposed norm has received different formulations. Some philosophers formulate the norm in terms of a condition for the rationality of action, others in terms of a condition for the appropriateness, warrant or permissibility of action. What the norm is supposed to govern is also expressed in various ways, for example in terms of "acting as if p," "acting for the reason that p," "treating p as a reason," "acting on p," "using p as a premise in one's practical reasoning and action" etc. Although these differences in formulation may matter (see Ram Neta, "Treating Something as a Reason for Action," *Noûs* 43, 4 (2009): 684-686; Mikkel Gerken, "Warrant and Action," *Synthese* 178, 3 (2011): 535n9) they won't concern us here.

³ Some philosophers say that it is knowledge. See e.g. John Hawthorne, *Knowledge and Lotteries* (Oxford: Oxford University Press, 2004); Jason Stanley, *Knowledge and Practical Interests* (Oxford: Oxford University Press, 2005); Timothy Williamson, "Contextualism, Subject-Sensitive Invariantism and Knowledge of Knowledge," *Philosophical Quarterly* 55, 219 (2005); John Hawthorne and Jason Stanley, "Knowledge and Action," *Journal of Philosophy* 105, 10 (2008). Other theorists argue that it is knowledge-level justification. See for example Jeremy Fantl and Matthew McGrath, *Knowledge in an Uncertain World* (Oxford: Oxford University Press, 2009); Clayton Littlejohn, "Must We Act Only on What We Know?" *Journal of Philosophy* 106, 8 (2009); Clayton Littlejohn, *Justification and the Truth-connection* (Cambridge: Cambridge University Press, 2012). According to Neta, "Treating Something," it is justification to believe that one knows. Some other writers think that the epistemic norm provides an epistemic condition sensitive to the practical context. See, among others, Jessica Brown, "Subject-Sensitive Invariantism and the Knowledge Norm for Practical Reasoning," *Noûs* 42, 2 (2008); Baron Reed, "A Defense of Stable Invariantism," *Noûs* 44, 2 (2010); Gerken, "Warrant and Action," Mikkel Gerken, "The Roles of Knowledge Ascriptions in Epistemic Assessment," *European Journal of Philosophy* 23, 1 (2015); Mikkel Gerken, *On Folk Epistemology. How We Think and Talk about Knowledge* (Oxford: Oxford University Press, 2017); Dustin Locke, "Practical Certainty," *Philosophy and Phenomenological Research* 90, 1 (2015). Finally, there are philosophers who embrace a pluralist view according to which there are various epistemic norms. See in particular Janet Levin, "Assertion, Practical Reason, and Pragmatic Theories of Knowledge," *Philosophy and Phenomenological Research* 76, 2 (2008).

Coincidence), so that knowledge-based evaluation constitutes a good heuristic for evaluating action and practical reasoning.⁴

In this paper, I raise three problems for this approach. First, I argue that Normal Coincidence (NC) is ad hoc. It relies on an unsupported frequency assumption that we should expect to be false given the warrant account that Gerken also endorses.⁵ Second, I show that, in any case, NC is insufficient to support the hypothesis that knowledge-based evaluation constitutes a good heuristic, for NC does not exclude that knowledge-level warrant is not frequently necessary and sufficient for appropriate action, nor that knowledge-level warrant is not sufficiently close to the degree of warrant which is (very) frequently necessary and sufficient for action. Third, I consider three alternative frequency hypotheses close to NC but apparently more fit to support the hypothesis that knowledge-based assessment of action constitutes a good heuristic. I show that they are even more ad hoc than NC.

My plan is as follows. In section 2, I clarify the claim that knowledge-based assessments are prominent in ordinary epistemic assessments of action by distinguishing three ways in which that is the case and how NC is supposed to explain this. In section 3, I explain why NC is ad hoc and insufficient and why the three alternatives are even more ad hoc. In section 4, I anticipate a possible reply appealing to the distinction between normal and abnormal situations and I show that it is unsatisfactory.

2. Explaining the Prominence of ‘Know’ in Epistemic Assessments of Actions

2.1 Three Ways in Which ‘Know’ Is Prominent

There are at least three ways in which the word ‘know’ is prominent in epistemic assessments of action. First, ‘know’ seems to be the *default* word of epistemic assessments of action. To see this, consider the following case, from Hawthorne and Stanley:

RESTAURANT. Hannah and Sarah are trying to find a restaurant, at which they have time-limited reservations. Instead of asking someone for directions, Hannah goes on her hunch that the restaurant is down a street on the left. After walking for some amount of time, it becomes quite clear that they went down the wrong

⁴ Gerken, “The Roles of Knowledge Ascriptions” and *On Folk Epistemology*.

⁵ Gerken, “Warrant and Action” and *On Folk Epistemology*.

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street.⁶

In this situation, it may be granted that Hannah's action is wrong because a mere hunch that *p* is insufficient to act on *p*. However, as Hawthorne and Stanley emphasize,

[a] natural way for Sarah to point out that Hannah made the wrong decision is to say, "You shouldn't have gone down this street, since you didn't know that the restaurant was here."⁷

Here, we may think that the use of 'know' is natural in the sense that, by default (in the absence of further information), it is appropriate to use 'know' rather than, e.g., 'justified' (or 'rational') belief. The fact that 'know' is the appropriate default term of evaluation constitutes a first way in which 'know' is prominent. Call this 'the default claim.'

Default claim: 'know' is the default term of epistemic assessments of action.

It is also remarkable that 'know' is the most frequently used term in our epistemic assessments of action.⁸ This fact constitutes a second way in which 'know' is prominent. Call this 'the frequency claim.'

Frequency claim: 'know' is the most frequently used term for epistemic assessment of action

Finally, 'knowledge' questions and ascriptions always sound relevant and appropriate when it comes to making a practical decision. As Reed (an opponent of the knowledge norm) writes:

[Y]ou are trying to decide whether to check if the train stops in Foxboro because it is extremely important that you get there as quickly as possible. You have not yet decided whether it is rational to check if the train makes that stop. One of the relevant factors in your decision would presumably be an answer to the question, do you know the train will stop there?⁹

⁶ Hawthorne and Stanley, "Knowledge and Action," 571.

⁷ Hawthorne and Stanley, "Knowledge and Action," 571.

⁸ As far as I know, no systematic study showing that 'know' is prominent in epistemic appraisal of action has ever been conducted, but 'know' is one of the ten words most used (see Gerken, *On Folk Epistemology*, 15) and, to my knowledge, all philosophers agree with the frequency claim.

⁹ Reed, "A Defense of Stable Invariantism," 232.

We should also note that a positive answer to a ‘knowledge’ question is always decisive for action, even when the stakes are high.¹⁰ For example, suppose you ask Jill whether you should take a certain train. Suppose she tells you “I know that this train will stop there. You should take it!” It would be quite odd for you to reply “But the question is not whether you know!” By saying “I know that this train will stop there,” Jill provides you with appropriate information with respect to whether you should take this train and act on the proposition that the train will stop there. The third way in which ‘know’ is prominent has to do with the role that ‘know’ plays in appropriate questions and recommendations when it comes to action. Call this the ‘guidance claim:’

Guidance claim: ‘know’ is always appropriate in questions and recommendations about what to do.

The fact that ‘know’ is prominent in epistemic assessments of action constrains any satisfactory account to provide a plausible explanation of this phenomenon.¹¹ Of course, the offered explanation has to be consistent with the assumed epistemic norm. This constitutes a challenge for philosophers rejecting the knowledge norm.¹²

2.2. Explaining the Prominence of ‘Know’ on the Basis of Normal Coincidence

Gerken is a classical invariantist about knowledge. According to him, the epistemic standards for knowledge (or ‘know’) do not shift with the practical context of the subject (or of the attributor). Regarding the epistemic norm of action, Gerken

¹⁰ See Jeremy Fantl and Matthew McGrath, “On Pragmatic Encroachment in Epistemology,” *Philosophy and Phenomenological Research* 75, 3 (2007): 562.

¹¹ Gerken explicitly understands the prominency claim as a frequency claim given normal situations:

Prominence of ‘Knowledge’ In normal cases of epistemic assessment of action and assertion, ordinary speakers frequently use the term ‘knowledge’ and its cognates (Gerken, *On Folk Epistemology*, 17).

But, as I explain below, he also grants that ‘know’ is the default term (and that the concept *knowledge* is the default concept) of epistemic assessments, and that ‘knowledge’ ascriptions have a “directive force” for action.

¹² Proponents of the knowledge account face a different challenge, though, that of explaining why we do not always use ‘know’ to assess actions. See Brown, “Subject-sensitive Invariantism” and Gerken, *On Folk Epistemology*, 18.

embraces the warrant account, according to which the epistemic norm of action provides different epistemic standards associated with different deliberative contexts, where a deliberative context is determined by a set of practical factors. More precisely:

Warrant Account (WA). In the deliberative context, DC, S meets the epistemic conditions on rational use of (her belief that) p as a premise in practical reasoning or of (her belief that) p as a reason for acting (if and) only if S is warranted in believing that p to a degree that is adequate relative to DC.¹³

The notion of warrant that Gerken invokes is non-factive. Therefore, on this view, knowledge is never necessary to warrant action. The notion of warrant is also gradable, and the practical factors that determine the degree of warrant which is adequate include in particular the urgency of action, the availability of evidence and other options, the stakes, and the social role of the agent.

In order to explain the prominence of ‘know,’ Gerken appeals to the frequency assumption that, in normal cases, knowledge-level warrant is frequently necessary and very frequently sufficient:

Normal Coincidence (NC). In normal cases of epistemic assessment, the degree of warrant necessary for S’s knowing that p is frequently necessary and very frequently sufficient for the epistemic permissibility of S’s acting on (the belief that) p.¹⁴

It’s important to note that by ‘normal,’ Gerken does not mean the most frequent for an individual. As we will see, according to him, a surgeon may frequently face an abnormal situation (see the discussion in section 4).

How is NC supposed to explain the prominence of ‘know’? The idea seems to be that if NC is correct then, in normal situations, it is frequently right, or at least frequently sufficiently close to being right, to use this term. This would explain the frequency claim.¹⁵

¹³ Gerken, “Warrant and Action,” 530.

¹⁴ Gerken, “The Roles of Knowledge Ascriptions” and *On Folk Epistemology*, 143.

¹⁵ Note, though, that ‘know’ is a factive term. If the warrant required for action is never factive, it is odd that we use a factive term. Gerken acknowledges this point and appeals to the idea that ‘know’ is learnt before other epistemic terms (see Gerken, “The Roles of Knowledge Ascriptions”). Perhaps Gerken could also say that, typically, what is knowledge-level warranted is believed and true, and hence, known, so that there is a rough coincidence between what is knowledge-level warranted and what is known. See also the discussion of Douven below.

NC could also explain the default claim. Again, assume that, given NC, knowledge-level warrant is frequently necessary and sufficient in normal situations, or at least sufficiently close to the required warrant for action. Then, epistemic assessments of action in terms of knowledge could be seen as relying on a good heuristic process appealing to knowledge as a good “cognitive proxy.”¹⁶ This strategy would manage to “provide a good trade-off between accuracy and communicative effectiveness.”¹⁷ This approach has it that we use the concept *knowledge* by default in our epistemic assessments. Indeed, default conceptualisations must be informative and easy to process. We may think that conceptualisations in terms of *know* are better placed than others in this respect. More fine-grained conceptualisations (in terms of seeing, remembering, etc.) would be more costly, involving the multiplication of more complex heuristics. In contrast, by using the concept *knowledge* in our epistemic assessments, we could use this concept as a middle-term in heuristic inferences like, for example, knowledge-output heuristics (e.g., from “S said that p,” to “S knows that p”) and knowledge-input heuristics (e.g., from “S knows that p” and “S knows that q,” to “S knows that r”). More coarse-grained conceptualisations (e.g., in terms of belief or reliable belief), on the other hand, would involve too great an information loss.¹⁸ If the concept *know* is the concept we use by default to make epistemic assessments of action, it’s not surprising that we use the word ‘know’ by default in these assessments (since ‘know’ expresses the concept *know*).

Let us now turn to the guiding claim according to which ‘know’ is prominent in the sense that ‘know(s)’ questions and ascriptions are always appropriate and relevant when it comes to making a practical decision. To explain this phenomenon, Gerken invokes a supposed pragmatic feature of ‘knowledge’ ascriptions.¹⁹ The starting idea is that an assertion that p can have different illocutionary effects, and hence, fulfil different communicative functions. A potential illocutionary effect of assertions is that of recommending a certain course of action. For example, by asserting “The window is open,” you can perform the indirect speech act of commanding someone to close the window. Likewise, ‘knowledge’ ascriptions are assertions. They can serve the communicative function of directing action. As with conversational implicatures, the directive force

¹⁶ Gerken, *On Folk Epistemology*, 149.

¹⁷ Gerken, *On Folk Epistemology*, 190.

¹⁸ Gerken, *On Folk Epistemology*, 101-104.

¹⁹ Gerken, *On Folk Epistemology*, ch. 8.

associated with ‘knowledge’ ascriptions is to some extent context-dependent. We can then distinguish *particularised* implicatures which heavily rely on the particularity of the context and the background assumptions ascribed to the interlocutors, and *generalised* implicatures, which constitute the default interpretation of the speech act. For example, “Can you pass the salt?” generally implicates a request for the salt. This is the default interpretation.

Given that an implicature can depend more or less on the context, Gerken articulates a notion of more or less *regularised* implicature, whereby it is registered how strongly the implicature depends on the particularity of the context. He proposes to say that in contexts where the question is to decide what to do, ‘knowledge’ ascriptions have a *highly regularised* directive illocutionary effect, such that the default interpretation is a recommendation to act in a certain way.

A possible worry here is that we cannot just assume that there is a highly regularised directive illocutionary effect associated with ‘knowledge’ ascriptions. As DeRose notes, an explanation postulating that ‘knowledge’ ascriptions have a pragmatic meaning besides their semantic meaning would be plainly ad hoc.²⁰ However, Gerken’s pragmatic explanation partially relies on the claim that the concept *knowledge* is the default concept of epistemic assessments. As he writes:

If the concept knowledge is used by default in intuitive epistemic judgments, it is reasonable to assume that the word ‘knowledge’ is used in a similar manner as a *communicative heuristic*.²¹

In other words, it is suggested that, in the same way as we use the concept *knowledge* as an heuristic for epistemic assessments, we use the word ‘know’ as an heuristic to communicate these assessments. If this is correct, it is not surprising that ‘knowledge’ ascriptions (typically) have the function of recommending or not recommending various actions in contexts where the point is to make a practical decision. In this respect, the hypothesis of a regularised pragmatic effect of ‘knowledge’ ascriptions is not ad hoc.

In summary, the explanation of the guiding claim requires the assumption that using the concept *knowledge* is a good heuristic for epistemic assessments of action. The plausibility of this assumption is supposed to rely in turn upon the truth of Normal Coincidence. For if the epistemic warrant required for action is, in

²⁰ Keith DeRose, *The Case for Contextualism: Knowledge, Skepticism, and Context*, Vol. 1. (Oxford: Oxford University Press, 2009), 120.

²¹ Gerken, *On Folk Epistemology*, 189.

normal contexts, frequently (much) higher or lower than knowledge-level warrant, the supposed heuristic could not constitute a good trade-off. Thus, although Gerken's proposal invokes default conceptualisations, Normal Coincidence remains the cornerstone of his general approach.

3. Normal Coincidence

It is now time to assess Gerken's proposal. As we have seen, it consists of three essential claims. First, there is WA. Second, there is NC. Third, there is the claim that NC explains the prominence of 'know' by supporting the hypothesis that knowledge-based assessment constitutes a good heuristic for practical reasoning and epistemic evaluation of action.

To begin with, consider NC. NC seems to rely on an unsupported frequency assumption, namely, that knowledge-level warrant is frequently necessary. Indeed, according to Gerken, low stakes cases such as the following do not require knowledge-level warrant:

KICKOFF. S believes that the game has started. But the only basis for her belief is that she vaguely remembers a stranger telling her the time of the kick-off in the bar the night before. But both S and the testifier were tipsy, and the fellow didn't seem all that reliable anyhow.²²

Suppose that S turns on the TV on the basis of his belief that the game has started, and assume that, given that the cost of error is low and the reward in accuracy is high, S's action is warranted. There is no reason to think that this kind of situation is exceptional. There are plenty of cases where we do not have much evidence in favour of a certain proposition, and still act on it. If the warrant account is true, these situations are typically ones in which a significantly low warrant for action is required, presumably a warrant lower than knowledge-level. If we frequently face these kinds of situations, then a warrant lower than knowledge-level is frequently sufficient. Since it's not at all implausible that we very frequently face very low stakes situations, the assumption that knowledge-level warrant is frequently necessary for rational action is at best ill-motivated.

One might want to reply that knowledge-level warrant is not that high. We frequently reach it in ordinary life. But this reply makes the claim that knowledge-level warrant is *very* frequently sufficient less plausible. For, if knowledge-level warrant is low, we should expect it to be *very* frequently *necessary* and merely

²² Gerken, *On Folk Epistemology*, 145.

frequently sufficient. Since Normal Coincidence has it that knowledge-level warrant is very frequently sufficient, it suggests that the standards for knowledge are not that low. But then, why assume that in frequent (normal) ordinary contexts, knowledge-level warrant is necessary? Although these considerations do not constitute a knock-down argument against NC, they suggest that NC is ad hoc, for NC is based on an unsupported frequency assumption.

Further, given the warrant account, we should expect NC to be false. Indeed, according to NC, normal practical situations are roughly uniform regarding the degree of warrant required for appropriate or rational action. But according to WA, there are many parameters which are relevant to determine the deliberative context. They can combine in many different ways. Presumably, each one can affect the epistemic warrant more or less strongly. But, if so, given all the ways in which these parameters can combine and the different degrees to which they can affect the epistemic warrant, it is very surprising that these parameters provide in frequent normal cases more or less the same epistemic condition. This is a second reason to think that NC is ad hoc.

The problem comes from the fact that, on Gerken's view, knowledge-level warrant is supposed to be independent of the practical situation and invariant, whereas the degree of warrant required for action is supposed to be sensitive to many practical factors to various degrees, and hence, very flexible. Given this, NC looks like a miracle.

On this score, compare the strategy deployed by Gerken to the strategy deployed by Douven with respect to the norm of assertion. Douven argues in favour of a rational credibility norm for assertion. According to him, we may explain why 'know' is a prominent term of epistemic assessment of assertions on the basis of the consideration that most of the time, what is rationally credible is known (most of the time, we believe what is rational to believe and our rational beliefs are true and not true by mere luck).²³ On this view, there is a normal coincidence between knowledge and rational credibility because the epistemic requirement for knowledge and rational credibility is the same. But if there is no independent reason to think that normal practical contexts are (roughly) uniform regarding the different parameters that they involve, NC is most unexpected.

Consider now the claim that NC explains the prominence of 'know.' NC explains the prominence of 'know' only if it supports the hypothesis that

²³ Igor Douven, "Assertion, Knowledge, and Rational Credibility," *Philosophical Review* 115, 4 (2006): 469-470.

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knowledge-based assessments constitute a good heuristic for practical reasoning and epistemic evaluation of action. This seems to suggest that NC can explain the prominence of ‘know’ only if it implies either that (1) knowledge-level warrant is frequently necessary and sufficient (in normal contexts), or (2) knowledge-level warrant is frequently close enough to the warrant which is frequently necessary and sufficient (in normal contexts).

Consider the first possibility:

Normal Coincidence* (NC*). In normal cases of epistemic assessment, the degree of warrant necessary for S’s knowing that p is frequently necessary and sufficient for the epistemic permissibility of S’s acting on (the belief that) p

The idea is that if knowledge-level warrant were frequently not necessary and sufficient (in normal contexts), then using ‘know’ (and the concept *know*) in ordinary assessments of action would be frequently too strong or too weak. Using ‘know’ (and the concept *know*) would be frequently inaccurate (in normal contexts) and could not constitute a good trade-off.

However, NC does not entail NC*. Suppose that there are seven cases out of ten in which knowledge-level warrant is necessary, so that we may say that knowledge-level warrant is frequently necessary. And suppose that there are nine cases out of ten where knowledge-level warrant is sufficient, so that we may say that knowledge-level warrant is very frequently sufficient. In this situation, it’s possible that only six cases out of ten are cases in which knowledge-level is necessary and sufficient. This may mean that knowledge-level warrant is not frequently necessary and sufficient, even if knowledge-level warrant is frequently necessary and very frequently sufficient.

The following table illustrates the situation (where ‘N’ stands for ‘knowledge-level warrant is necessary’ and ‘S’ stands for ‘knowledge-level warrant is sufficient’):

S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
N	N	N	N	N	N	N			
	S	S	S	S	S	S	S	S	S
	N&S	N&S	N&S	N&S	N&S	N&S			

Of course, it is possible to stipulate afterwards a threshold for “frequent” and “very frequent” such that in the case under consideration knowledge-level warrant is frequently necessary and sufficient. For example, we may stipulate that “six cases out of ten” counts as “frequent.”

However, this does not get us very far, for if we postulate that “six cases out of ten” counts as “frequent,” then the following table is possible given NC:

S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
N	N	N	N	N	N				
	S	S	S	S	S	S	S	S	S
	N&S	N&S	N&S	N&S	N&S				

In this table, knowledge-level warrant is frequently necessary (by assumption) and very frequently sufficient, but it seems false that knowledge-level warrant is frequently necessary and sufficient, for there are only five cases of that sort. If one wants to maintain afterwards that “five cases out of ten” can count as “frequent,” we can repeat the operation.

Second, we should note that the lower the assumed threshold for “frequent,” the less plausible is the claim that using the concept *knowledge* and the word ‘know’ constitute good heuristics for practical reasoning and epistemic assessments of action. For example, we may accept that “six cases out of ten” counts as “frequent,” but then it becomes difficult to argue on this basis that using the concept *knowledge* and the word ‘know’ constitutes a good trade-off. Gerken’s approach does not fit well with the idea that the threshold for “frequent” could be that low.

In any case, it’s clear that the more cases we postulate in which knowledge-level warrant is necessary and sufficient, the more ad hoc and implausible the proposal is. Indeed, assuming WA and NC, we have reason to expect that cases in which knowledge-level warrant is necessary and sufficient should be the exception, rather than the rule.

First, suppose (following NC) that knowledge-level warrant is very frequently sufficient. Presumably, this is so either because knowledge-level warrant is quite high, or because in these very frequent cases the warrant required for action is quite low. In either case, this seems to conflict with the claim that

knowledge-level warrant is frequently necessary in these cases. For if knowledge-level warrant level is frequently necessary in these cases, this is so either because knowledge-level warrant is quite low, or because in these cases the warrant required for action is quite high. In other words, there is no reason to expect cases in which knowledge-level warrant is sufficient to be cases in which knowledge-level warrant is necessary; and there is no reason to expect cases in which knowledge-level warrant is necessary to be cases in which knowledge-level warrant is sufficient. Therefore, there is no reason to expect many cases in which knowledge-level warrant is necessary and sufficient.

Second, the stipulation that knowledge-level warrant is frequently necessary and sufficient requires treating many normal practical situations uniformly by assuming that they require exactly knowledge-level warrant (no more, no less). But, as said above, given WA, we should not expect normal practical situations to be uniform, and let alone in this way.

Consider now the second possibility, according to which, in normal cases, knowledge-level warrant is frequently close (enough) to the epistemic warrant required for acting on p:

NC** In normal cases of epistemic assessment, the degree of warrant necessary for S's knowing that p is frequently close to the warrant necessary and sufficient for the epistemic permissibility of S's acting on (the belief that) p

First, note that NC doesn't entail NC** either. For it is possible that knowledge-level warrant is very frequently sufficient and frequently necessary, but (a) the cases in which knowledge-level warrant is necessary and sufficient are not frequent, (b) the very frequent cases in which knowledge-level warrant is sufficient require much less than knowledge-level warrant, and (c) the frequent cases in which knowledge-level warrant is necessary require much more than knowledge-level warrant, so that NC is true but NC** is false.

The following table illustrates this possibility (where 'N' stands for 'knowledge-level warrant is necessary' and 'S' stands for 'knowledge-level warrant is sufficient,' '+' stands for 'much more than knowledge-level warrant' and '-' stands for 'much less than knowledge-level warrant'):

S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
N&+	N	N	N	N	N	N			
	S	S	S	S	S	S	S&-	S&-	S&-
	N&S	N&S	N&S	N&S	N&S	N&S			

Since this distribution is possible given NC, NC is still insufficient to explain the prominence of ‘know.’

Further, the arguments to the effect that NC and NC* are ad hoc apply equally well to NC**. First, NC** also relies on an unsupported frequency claim. Second, given WA we have no reason to expect normal cases to be uniform with respect to the degree of warrant required. Therefore, we should not expect most of these cases to be distributed around knowledge-level warrant.

Finally, some may think that ‘know’ is vague, and so that what ‘knowledge level’ warrant really amounts to is also vague. On this view, even if, given WA, there are many parameters which can affect the warrant, in normal cases, they do not affect the required warrant strongly enough to require more or less than what can count as knowledge-level warrant:

NC*** In normal cases of epistemic assessment, the warrant necessary and sufficient for the epistemic permissibility of S’s acting on (the belief that) p frequently falls within the borderline area for knowledge-level warrant.

However, NC*** does not follow from NC either. Suppose we grant NC but (a) the cases in which knowledge-level warrant is necessary and sufficient are not frequent, (b) the very frequent cases in which knowledge-level warrant is sufficient require much less than knowledge-level warrant, and (c) the frequent cases in which knowledge-level warrant is necessary require much more than knowledge-level warrant. NC is true but NC*** is false.

Further, the claim that the warrant required for appropriately relying on a proposition in action falls within the borderline area for knowledge level warrant is also open to the objection raised against NC, NC* and NC**. NC*** is an unsupported assumption about frequency, and given WA, we have no reason to expect NC*** to be the case. Appealing to the vagueness of ‘know’ does not help to save the proposal from ad hocness.

4. Normal and Abnormal Situations

In this section, I wish to consider whether we can defend Gerken's approach by insisting that it is only in *normal* cases of epistemic assessments that the frequency assumption applies.

An advocate of the warrant account could insist that cases in which the frequency assumption is false are (very) frequently abnormal. And even if practical parameters can combine in many different ways and affect the warrant to various degrees, it may be suggested that it is mostly in *abnormal* cases that they affect the warrant in such a way that (much) more or less than knowledge-level warrant is required.

The invocation of a distinction between normal and abnormal practical situations is problematic, though. First, the claim that 'know' is prominent in epistemic assessments of action is partially a statistical claim regarding the frequency of our actual epistemic assessments. In contrast, Normal Coincidence is a claim about a statistical fact given normal (epistemic and practical) circumstances. But if one thinks that normal practical situations are not necessarily the most frequent in the actual circumstances, then it is difficult to see how Normal Coincidence could help in explaining the fact that 'know' is (statistically) prominent in actual circumstances.

Second, on Gerken's approach, the notion of *abnormal* practical circumstances seems to be sometimes determined in terms of frequency, and sometimes not. Consider Brown's surgeon case:

SURGEON. A student is spending the day shadowing a surgeon. In the morning he observes her in clinic examining patient A who has a diseased left kidney. The decision is taken to remove it that afternoon. Later, the student observes the surgeon in theatre where patient A is lying anaesthetised on the operating table. The operation hasn't started as the surgeon is consulting the patient's notes. The student is puzzled and asks one of the nurses what's going on:

Student: I don't understand. Why is she looking at the patient's records? She was in clinic with the patient this morning. Doesn't she even know which kidney it is?

Nurse: Of course, she knows which kidney it is. But, imagine what it would be like if she removed the wrong kidney. She shouldn't operate before checking the patient's records.²⁴

²⁴ Brown, "Subject-Sensitive Invariantism," 176.

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About this kind of case, Gerken writes:

For example, it should be clear enough that the practical contexts in [such cases] are abnormal due to the abnormally high stakes. Again, a broad externalist consideration motivates this assumption. It is infrequent that a single action determines life or death.²⁵

Here, it seems that the fact that a kind of action is not frequent makes it abnormal. However, Gerken continues:

Of course, surgeons face life-or-death scenarios more frequently. But this may be acknowledged by saying that surgeons are frequently in contexts with abnormally high stakes.²⁶

Here, it seems that the fact that the action is frequent does nothing to show that it is normal. As a result, it is very unclear how frequency and normality are related, and hence, it is difficult to see whether this distinction can help to show that there is no tension between the warrant account and Normal Coincidence.

Perhaps by 'normality' Gerken means the (relative) frequency for the average individual. However, it is still problematic to classify cases with high stakes (like the surgeon's case) as abnormal on the basis of the fact that they feature high stakes. This would manifest a tendency to categorize most of the practical situations in which the practical factors are such that they require a warrant (much) stronger (or weaker, if the stakes are very low) than knowledge as abnormal. But then, Normal Coincidence (or the alternative frequency assumption) would be trivially true, for given the very notion of a normal practical situation used, most situations in which (much) more or less than knowledge-level warrant is required would count as abnormal situations.

In light of these considerations, it is hard to see how an advocate of the warrant account could appeal to the distinction between normal and abnormal practical situations: either normality is not defined in terms of frequency, and hence Normal Coincidence is insufficient to explain the prominence of 'know' in actual epistemic assessments of actions; or normality is defined in terms of frequency, and then, given all the different ways in which the practical factors can combine and affect the warrant, it is quite surprising that most normal practical situations require exactly, or something very close to, knowledge-level warrant.

²⁵ Gerken, *On Folk Epistemology*, 143.

²⁶ Gerken, *On Folk Epistemology*, 144.

5. Conclusion

It is indisputable that ‘know’ (and its cognates) is prominent in ordinary epistemic assessments of action. Any satisfactory account of the epistemic norm of action must provide an explanation of this fact. Satisfying this constraint is easy for the knowledge account, but it is more challenging for alternative accounts. While rejecting the knowledge account, Gerken has developed an explanation relying on the assumption that, in normal cases of epistemic assessments, knowledge-level warrant is very frequently necessary and frequently sufficient (Normal Coincidence). On this view, conceptualising our assessments in terms of knowledge and using the word ‘know’ (and its cognates) in evaluation of action and practical reasoning would be a good heuristic. I have argued, however, that this proposal is ad hoc, for it relies on an unsupported frequency assumption which we should expect to be false given the warrant account Gerken also embraces. Further, as such, Normal Coincidence is insufficient to support the hypothesis that knowledge-based assessments of action and practical reasoning constitute a good heuristic, and alternatives to Normal Coincidence which seem better placed in this respect seem even more ad hoc.²⁷

²⁷ I would like to thank Davide Fassio, Jie Gao, Arturs Logins and Santiago Echeverri for very helpful comments on earlier versions of this paper. A previous version was presented in 2018 at the SoPhA congress in Louvain-la-Neuve (Belgium). Thanks to the audience for their comments. The work on this paper was supported by the SNSF research project ‘Rationality and Reflection’ (grant number 178039).