

***A Priori* Skepticism and the KK Thesis**

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In Beebe (2011), I argued against the widespread reluctance of philosophers to treat skeptical challenges to our *a priori* knowledge of necessary truths with the same seriousness as skeptical challenges to our *a posteriori* knowledge of contingent truths. Vahid (2013) offers several reasons for thinking the unequal treatment of these two kinds of skepticism is justified, one of which is *a priori* skepticism's seeming dependence upon the widely scorned KK thesis. In the present article, I defend *a priori* skepticism against Vahid's criticisms.

Keywords: Skepticism; *a priori* skepticism; second-order knowledge; KK thesis

In a previous issue of this journal, Hamid Vahid (2013) offers a thorough examination of some recent non-standard approaches to philosophical skepticism (e.g., Beebe 2010; 2011; Kraft MS; Kung MS; Schaffer 2010). One non-standard form of skepticism, dubbed '*a priori* skepticism,' challenges our ability to have *a priori* knowledge of necessary truths (cf. Beebe 2011). Against proponents of these approaches, Vahid argues that many non-standard skeptical challenges fail to raise any significant doubts concerning first-order knowledge claims—i.e., claims of the form '*S* knows that *p*,' for some domain of propositions. Rather, Vahid maintains that these challenges at best contest our ability to have second-order knowledge—i.e., to know that we know the

propositions in question. Because skepticism about second-order knowledge claims is seen as significantly less threatening to our overall view of ourselves as knowledgeable creatures, Vahid suggests that non-standard skepticism should be considered philosophically less interesting than its supporters maintain.

Against Vahid (2013), I will argue that *a priori* skepticism can in fact pose an important challenge to first-order knowledge of *a priori* necessities. *Pace* Vahid, I will argue that *a priori* skeptical challenges do not need to rely upon implausibly strong epistemic principles that entail some version of the widely rejected KK thesis (i.e., the thesis that first-order knowledge entails second-order knowledge). Furthermore, I contend that even if *a priori* skeptical challenges entail some version of the KK thesis, it is not clear that weaker versions of the thesis should be treated with the same scorn as stronger, more well-known versions of the thesis.

I.

Epistemologists generally believe that skeptical challenges to our *a posteriori* knowledge of contingent propositions about the external world can be philosophically significant in ways that attempts to challenge our *a priori* knowledge of necessary truths cannot be. The thought is that the question ‘How do you know you are not being deceived about the external world by an evil demon?’ can give rise to a philosophically interesting dilemma but that ‘How do you know you are not being deceived by an evil demon into mistakenly thinking that two plus three equals five?’ cannot. In Beebe (2011), I mounted an attack against the unequal treatment these two kinds of skepticism receive. My goal, then and now, is not to argue that *a priori* skepticism is true but merely to argue that it should be taken seriously as a philosophically challenging form of skepticism.

The starting point for my argument was the widely shared view that the flat-footed Moorean response to skepticism ('Here is one hand, and here is another') is inadequate. Consider the following argument against dreaming-based skepticism about the external world, inspired by G. E. Moore (1959b):

- (1.1) I recognize that knowing that I am standing and merely dreaming that I am standing are incompatible.
- (1.2) If I know that I am standing, then I know that I am not merely dreaming that I am standing.
- (1.3) I know that I am standing.
- (1.4) Therefore, I know that I am not merely dreaming that I am standing.

Despite infrequent objections from a handful of philosophers (e.g., Klein 1981), the foregoing argument is widely viewed as being problematic when used as a response to dreaming skepticism. However, opinions diverge as to precisely what the defects of the argument are. Candidate flaws include the following:

- (2.1) The third premise is false, because we cannot ordinary propositions about the external world (Nozick 1981).
- (2.2) Even if the argument's premises are true, it is deductively valid, and its conclusion is deduced from its premises, one cannot come to know the falsity of a skeptical hypothesis on the basis of an argument such as this.¹
- (2.3) Even if the argument's premises are true, it is deductively valid, its conclusion is deduced from its premises, and one comes to know the falsity of the skeptical hypothesis in question on the basis of this argument, arguing in this manner

¹ Cf. Pryor (2004) for detailed discussion of this issue.

nevertheless fails to engage with the most important features of the skeptical challenge at hand.²

Proponents of *a priori* skepticism build upon the widespread dissatisfaction with the basic Moorean response to skepticism by challenging those who would dismiss *a priori* skepticism as a non-starter to explain how they are offering anything more than a basic Moorean response themselves.

In Beebe (2011), I argued that those who question the ability of *a priori* skepticism to mount a serious philosophical challenge are arguing in something like the following fashion:

(3.1) I recognize that knowing that $2 + 3 = 5$ and being deceived by an evil demon into erroneously believing that $2 + 3 = 5$ are incompatible.

(3.2) If I know that $2 + 3 = 5$, then I know that I am not being deceived by an evil demon into erroneously believing that $2 + 3 = 5$.

(3.3) I know that $2 + 3 = 5$.

(3.4) Therefore, I know that I am not being deceived by an evil demon into erroneously believing that $2 + 3 = 5$.

Despite the fact that many philosophers seem to find the argument from (3.1) to (3.4) to be considerably more compelling than the one from (1.1) to (1.4), I contend that there is little reason to treat them differently. If merely insisting that one has hands constitutes a failure to engage with the external world skeptic's challenge, then merely insisting that one has *a priori* knowledge should constitute a failure to engage with the challenge of *a priori* skepticism. While I do not wish to argue that the argument against *a priori* skepticism suffers from the defect described in (2.1), I do want to suggest that it suffers from one of the defects found in (2.2) and

² Cf. Pritchard (2007) for detailed discussion of this issue.

(2.3), although I will remain neutral about which of these two descriptions most accurately captures the error.

II.

Vahid's (2013) critique of *a priori* skepticism centers around the difficulties that manifest themselves when one tries to articulate the epistemic principles upon which *a priori* skeptical challenges are based. In Beebe (2011), I considered the possibility of a bumbling evil demon who, in an effort to deceive his subjects about *a priori* matters, attempts to make necessary falsehoods appear "right, compelling, acceptable" and necessary truths seem "wrong, off-putting and eminently rejectable" by inducing in his subjects the cognitive phenomenology that sometimes accompanies instances of *a priori* insight. However, because the demon in question was "not very practiced in the art of deception," he sometimes mistakenly made necessary truths seem correct to his subjects. I maintained that if the evil demon's victims were to base their beliefs in the propositions in question on the faux intuitive experiences supplied by their unseen tormentor, they would not amount to knowledge—however true those beliefs might be.

An important feature of my attempt to articulate one kind of *a priori* skeptical challenge is that the incompatibility claimed between the putative knowledge, on the one hand, and the skeptical hypothesis in question, on the other, does not concern the truth value of the subjects' beliefs. Thus, I put forward a skeptical challenge that fails to satisfy the following constraint:

(SH1) In order for a skeptical hypothesis, *SK*, to raise a significant skeptical challenge to *S*'s putative knowledge that *O*, *SK* must be incompatible with *O*.³

³ Cf. Beebe (2010) for detailed discussion of the set of constraints skeptical hypotheses must satisfy.

In contrast to the skeptical challenges considered in (1.1) to (1.4) and (3.1) to (3.4), the most common skeptical challenges to our knowledge of the external world do satisfy (SH1). Consider, for example, the following argument for brain-in-a-vat (hereafter 'BIV') skepticism:

(4.1) I recognize that having hands and being a handless BIV are incompatible.

(4.2) If I know that I have hands, then I know that I am not a handless BIV.

(4.3) I don't know that I am not a handless BIV.

(4.4) Therefore, I don't know that I have hands.

Because this argument trades on the incompatibility between having hands and being a handless BIV, it satisfies (SH1).

Despite the fact that many epistemologists tacitly endorse (SH1), it is easy to appreciate that it cannot be a general requirement on skeptical challenges. Moore (1959a, p. 245) famously illustrated the compatibility between dreaming skeptical hypotheses and putative knowledge claims with the following anecdote:

But, on the other hand, from the hypothesis that I am dreaming, it certainly would not follow that I am *not* standing up; for it is certainly logically possible that a man should be fast asleep and dreaming, while he is standing up and not lying down. It is therefore logically possible that I should both be standing up and at the same time dreaming that I am; just as the story, about a well-known Duke of Devonshire, that he once dreamt that he was speaking in the House of Lords and, when he woke up, found that he *was* speaking in the House of Lords, is certainly logically possible.

Thus, it seems that skeptical hypotheses can raise a challenge to *S*'s knowledge that *O* without entailing not-*O*.

Vahid (2013), however, maintains that any skeptical argument that fails to satisfy (SH1) cannot appeal to the closure principle for knowledge and that this ultimately prevents such arguments from mounting a challenge to first-order knowledge. The most common justification for (4.2) is the following epistemic principle:

(CP1) If S knows that p , and S knows that p entails q , then S knows (or is in a position to know) that q .

(CP1) and (4.1) combine to yield (4.2) for the relevant pair of propositions. Now consider the following version of the argument from (3.1) to (3.4), modified so that it is now an argument in favor of rather than against *a priori* skepticism:

(5.1) I recognize that knowing that $2 + 3 = 5$ and being deceived by an evil demon into erroneously believing that $2 + 3 = 5$ are incompatible.

(5.2) If I know that $2 + 3 = 5$, then I know that I am not being deceived by an evil demon into erroneously believing that $2 + 3 = 5$.

(5.3) I don't know that I am not being deceived by an evil demon into erroneously believing that $2 + 3 = 5$.

(5.4) Therefore, I don't know that $2 + 3 = 5$.

Unlike the argument from (4.1) to (4.4), the second premise of this argument cannot be based upon (CP1). Closure trades upon the incompatibility between the truth of an ordinary proposition and a skeptical hypothesis, while (5.2) trades upon the incompatibility between knowing an ordinary proposition and a skeptical hypothesis.

Some skeptical arguments do not rely upon (CP1) but instead appeal to considerations of evidential underdetermination. For example:

(6.1) I recognize that having hands and being a handless BIV are incompatible.

(6.2) If my evidence for believing that that I have hands does not favor this proposition over the proposition that I am a handless BIV, then my evidence does not justify me in believing that I have hands.

(6.3) My evidence for believing that that I have hands does not favor this proposition over the proposition that I am a handless BIV.

(6.4) Therefore, I am not justified in believing that that I have hands.

(6.5) Therefore, I do not know that I have hands.

The second premise of this argument is based upon the following principle:

(UP) If S 's evidence for believing that p does not favor p over some hypothesis q which S knows to be incompatible with p , then S 's evidence does not justify S in believing p .

However, the proponent of the argument from (5.1) to (5.4) cannot appeal to (UP) to justify (5.1) because the linchpin of (UP), like (CP1), is the incompatibility between the truth of an ordinary proposition and a skeptical hypothesis.

Vahid (2013) notes that the most likely choice for an epistemic principle to support (5.2) is the following:

(CP2) If S knows that p , and S knows that q is incompatible with S 's knowing that p , then S knows (or is in a position to know) that q is false.

However, (CP2) directly entails the KK thesis:

(KK1) If S knows that p , then S knows (or is in a position to know) that S knows that p .

For a number of years, there has been broad agreement in philosophy that (KK1) is false, since it seems that there can be cases where people have first-order knowledge of a proposition without being in a position to have second-order knowledge of that proposition.

Vahid (2013) argues that if *a priori* skeptical arguments can challenge first-order knowledge claims about putatively necessary truths only by appealing to an implausibly strong epistemic principle, they will not succeed in mounting a very significant philosophical challenge. Vahid goes on to consider what kinds of knowledge *a priori* skeptics might challenge without relying upon (CP2). Vahid suggests that the following argument is the strongest one that proponents of *a priori* skepticism would be able to mount:

(7.1) I recognize that knowing that I know that $2 + 3 = 5$ and being deceived by an evil demon into erroneously believing that $2 + 3 = 5$ are incompatible.

(7.2) If I know that I know that $2 + 3 = 5$, then I know that I am not being deceived by an evil demon into erroneously believing that $2 + 3 = 5$.

(7.3) I don't know that I am not being deceived by an evil demon into erroneously believing that $2 + 3 = 5$.

(7.4) Therefore, I don't know that I know that $2 + 3 = 5$.

(7.2), in contrast to (5.2), can be based upon the standard closure principle, (CP1), which is weaker than (CP2) and does not entail (KK1). However, the conclusion of the argument, (7.4), represents a challenge only to second-order knowledge, not first-order knowledge. In the following section, I will defend *a priori* skepticism's ability to mount a significant philosophical challenge to first-order knowledge claims against the objections of Vahid.

III.

The first point I would like to make in defense of *a priori* skepticism is to note that it is structurally parallel to dreaming-skepticism. As we saw above, dreaming-skepticism of the sort considered by Moore cannot appeal to (CP1), yet it is universally viewed as being capable of

lodging a significant skeptical challenge to first-order knowledge claims. Barry Stroud (1984, ch. 1) and Ernest Sosa (1999, 145) both note that dreaming-skepticism may well require a (KK1)-entailing epistemic principle such as (CP2) but do not dismiss the power of dreaming-skepticism as a result. My suggestion is that *a priori* skeptical arguments like the one from (5.1) to (5.4) rest on as firm a basis as traditional arguments for dreaming-skepticism.

Relatedly, if we find arguments for dreaming-skepticism to be compelling, and if we believe they require strong epistemic principles like (CP2), then perhaps we should reconsider our aversion to the KK thesis. It should be noted that early versions of the KK thesis (e.g., Hintikka 1962) were formulated as follows:

(KK2) If *S* knows that *p*, then *S* knows that *S* knows that *p*.

(KK2) is stronger than (KK1) because the parenthetical qualification ‘or is in a position to know’ in (KK1) is designed to allow for the possibility that someone might know that *p*, yet not have gotten around to reflecting upon or forming a second-order belief about whether they know that *p*. (KK2) says that knowing that *p* automatically comes with knowing that you know that *p*, which seems psychologically implausible. Early formulations of the closure principle, such as the following, suffered from a similar difficulty:

(CP3) If *S* knows that *p*, and *S* knows that *p* entails *q*, then *S* knows that *q*.

(CP1), like (KK1) but unlike (CP3), allows for the possibility that someone who is in a position to know something may not have gotten around to putting all of the pieces together, intellectually speaking. According to (CP1), one might know that *p* and know that *p* entails *q*, without yet having formed the belief that *q* is true. Epistemologists should ask themselves whether their decades-old aversion to the KK thesis is not simply an aversion to an overly strong formulation

of the thesis and whether there are any good reasons to extend this aversion to weaker formulations.

My second reply to Vahid (2013) is that *a priori* skeptical arguments can in fact be based upon (CP1) after all. Consider the following argument:

(8.1) I recognize that $2 + 3 = 5$ and being deceived by an evil demon into falsely believing that $2 + 3 = 5$ are incompatible.

(8.2) If I know that $2 + 3 = 5$, then I know that I am not being deceived by an evil demon into falsely believing that $2 + 3 = 5$.

(8.3) I don't know that I am not being deceived by an evil demon into falsely believing that $2 + 3 = 5$.

(8.4) Therefore, I don't know that $2 + 3 = 5$.

In contrast to the argument from (5.1) to (5.4), where the focus was on the incompatibility between knowing an ordinary proposition and a skeptical hypothesis, the argument from (8.1) to (8.4) takes the more common path of focusing on the incompatibility between an ordinary proposition and a skeptical hypothesis. Thus, it satisfies (SH1), and its second premise can be justified by (CP1). Furthermore, it is implausible to suggest that the skeptical force of the argument can be resisted simply by insisting, in the spirit of Moore, that one has the kind of knowledge that the *a priori* skeptic seeks to call into question.

Finally, an underappreciated feature of skeptical challenges to the truth of putatively *a priori* necessities is that they can be based upon hypotheses that many scholars believe to be literally true. We must resist the temptation to think that skeptical hypotheses are somehow required to appeal to far-fetched scenarios about evil demons, The Matrix, or other bizarre realities that no one believes to be actual. A skeptical hypothesis is simply one that explains how

it is that you think you have knowledge in some domain but in fact do not. A skeptical hypothesis, in other words, can be a “real, live” possibility that, in the words of Bryan Frances (2005, 561), has been “judged actually true or about as likely as any relevant possibility by a significant number of well informed, well respected, and highly intelligent experts in the field” on the basis of a “significant (not to say exhaustive) evaluation by experts over many years.”

Mathematical fictionalists (e.g., Field 1980; 1989; Balaguer 1998; Leng 2010), for example, maintain that the best semantics for mathematical claims entails the existence of a variety of abstract objects (e.g., numbers, functions, sets) but that, since abstract objects do not in fact exist, mathematical claims are false.⁴ Fictionalists maintain that mathematical language can be quite useful, if not indispensable, in helping us to discover and spell out the consequences of our best empirical theories, and thus we should continue to use the false claims of pure mathematics and mathematically-infused formulations of empirical theories. However, since knowledge is factive, fictionalism entails that we cannot know that $2 + 3 = 5$.

Although mathematical fictionalism is not typically viewed as a form of epistemological skepticism, it can function as one. Both fictionalism and brain-in-a-vat skepticism challenge the commonsense conviction that we have genuine knowledge of some domain of propositions. Each offers an account of how it is that we might have reasonably come to think we had such knowledge without this being true. Fictionalism thus enables to construct the following skeptical argument:

⁴ Above I suggested that skeptical hypotheses do not need to invoke “far-fetched scenarios” involving evil demons, etc., but then I presented mathematical fictionalism, which will seem to many to be as far-fetched as any traditional skeptical hypothesis. Commenting on this issue, Mark Balaguer (2011) writes:

When one first hears the fictionalist hypothesis, it can seem a bit crazy. Are we really supposed to believe that sentences like ‘3 is prime’ and ‘ $2 + 2 = 4$ ’ are false? But the appeal of fictionalism starts to emerge when we realize what the alternatives are. By thinking carefully about the issues surrounding the interpretation of mathematical discourse, it can start to seem that fictionalism is actually very plausible, and indeed, that it might just be the least crazy view out there.

However surprising the fictionalist thesis may seem, it should be kept in mind that, while no one really thinks we are BIVs, many scholars actually endorse fictionalism.

(9.1) I recognize that (the literal truth of) $2 + 3 = 5$ and mathematical fictionalism are incompatible.

(9.2) If I know that $2 + 3 = 5$, then I know that mathematical fictionalism is false.

(9.3) I don't know that mathematical fictionalism is false.

(9.4) Therefore, I don't know that $2 + 3 = 5$.

It is far from clear that, by simply knowing that $2 + 3 = 5$ and recognizing the incompatibility between this proposition and mathematical fictionalism, one would be in a position to know that fictionalism is false. Even if it were possible to know the falsity of fictionalism on this basis, it seems evident that using (9.1), (9.2), and the negation of (9.4) to argue for the negation of (9.3) would not constitute a philosophically satisfying response to the skeptical challenge to our ordinary view of mathematical knowledge that fictionalism presents.

Consider now the following pair of claims:

(AP1) Purely hypothetical scenarios involving evil demons and brains in vats that no one believes actually represent the real world can be used to motivate philosophically significant skeptical challenges to our knowledge of claims about the external world.

(AP2) Philosophical theories about the semantics and metaphysics of mathematical claims that some scholars actually believe represent the real world cannot be used to motivate philosophically significant skeptical challenges to our knowledge of mathematical claims.

Many epistemologists appear to accept both of these claims, but I find their conjunction to be abominable. The fact that there is serious scholarship being put forward in support of the

hypotheses in (AP2) but not in favor of those in (AP1) strongly suggests that the former should be given as much consideration as the latter.

In this paper, I have endeavored to defend *a priori* skepticism against Vahid's (2013) charge that it can only mount a skeptical challenge to our second-order knowledge of necessary truths because any attempt to challenge first-order *a priori* knowledge claims must appeal to implausibly strong epistemic principles. I have argued that *a priori* skepticism can be formulated without appeal to such principles and suggested that not every formulation of these principles may be as implausible as epistemologists have assumed. I have also argued that the existence of at least one form of fictionalism about putatively *a priori* necessities gives *a priori* skeptical hypotheses a kind of respectability that no hypothesis about evil demons or brains in vats has ever enjoyed. Therefore, I conclude that *a priori* skepticism should be seen as posing a philosophically significant challenge to our first-order knowledge of *a priori* necessities.

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