

The paradigm response to skepticism

*This paper introduces and defends the paradigm response to external world skepticism. To understand it, consider an analogy. One of the hallmarks of being a bird is an ability to fly. A penguin lacks this hallmark and thus fails to be a paradigm bird. Likewise, there are various hallmarks of knowledge. Some of your external world beliefs lack some of these hallmarks, and thus fail to be paradigm cases of knowledge. Just as the inability of penguins to fly doesn't prevent them from being birds, likewise the lack of these hallmarks doesn't prevent your beliefs from being knowledge. It just prevents them from being paradigm cases thereof.*

Keywords: Paradigm, hallmark, external world skepticism

This paper introduces a new response to external world skepticism. In brief, the response says that some of your external world beliefs, while amounting to knowledge, fail to be paradigm cases thereof.

To understand it, we can consider an analogy. One of the hallmarks of being a bird is an ability to fly. A penguin lacks this hallmark and thus fails to be a paradigm bird.

Likewise, there are various hallmarks of knowledge. Some of your external world beliefs lack some of these hallmarks, and thus fail to be paradigm cases of knowledge. Just as the inability of penguins to fly doesn't prevent them from being birds, likewise the lack of these hallmarks doesn't prevent your beliefs from being knowledge. It just prevents them from being paradigm cases of knowledge.

I will call this sort of response the “paradigm” response to skepticism.<sup>1</sup>

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<sup>1</sup>It's worth contrasting my view with a response with a similar name – the “paradigm case argument” originating in the 1940s and associated with Norman Malcolm. Malcolm used ideas about the way we learn terms to support the claim that our external world beliefs are paradigms of knowledge [Malcolm, 1942]. My view, by contrast, denies that these beliefs are paradigms of knowledge. In spirit, my view is closer (though not equivalent) to views on which there are higher and lower forms of knowledge, with our external world beliefs counting as knowledge of a lower sort. Such views arguably stretch back to Plato [Plato, 2004]. I apply the view of knowledge I discuss here to the threshold problem in

As I hope to show, it has a number of attractions. Its core claims are plausible and it accommodates a number of our key judgments.

It perhaps goes without saying, but accommodating our key judgments is not easy to do. After all, many philosophers take arguments for external world skepticism to provide a paradox.<sup>2</sup> In particular, they think these arguments provide us with a conflicting set of claims, each of which is plausible. This makes it difficult to accommodate our key judgments; if a set of judgments supports conflicting claims, then it's hard to see how we can accommodate them all.

This paper is structured as follows: Section 1 clarifies the paradigm response to skepticism, Section 2 defends its core claims and works to show how it can accommodate a number of our key judgments and Section 3 discusses its ability to accommodate an additional set of judgments related to so-called “abominable conjunctions”.

## 1 Clarifications

### 1.1 Hallmarks

As I hinted at in the introduction, I understand the notion of a paradigm in terms of the notion of a hallmark. Because of this, it will be helpful to start by clarifying the notion of a hallmark.

To understand this notion, it will be helpful to have some examples before us.

Let us start with dessert. There are various hallmarks of being a dessert: (i) being served after the main course (ii) having certain ingredients (e.g. chocolate, vanilla, fruit) (iii) coming in certain forms (e.g. cake, pie, or cookies), and (iv) being sweet.

Arguably, none of these hallmarks is necessary or sufficient for being a dessert. So, for example, a dessert need not come after main course; you can have it first and have main course second. For another example, desserts can have none of the standard ingredients (e.g. bacon ice cream) and non-

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my [Immerman, Forthcoming]. Thanks to several anonymous referees for suggesting I discuss these points.

<sup>2</sup>See e.g. [Becker, 2007, 2], [Brueckner, 2008], [Cohen, 1988, 94], [Cohen, 2000, 100], [Cohen, 2001, 94], [DeRose, 1995], [Gerken, 2012, 386], [Lammenranta, 2008, 11], [Pritchard, 2001, 87-8], [Pritchard, 2002], [Sosa, 2009, 53-4], [Wright, 1991, 89].

desserts can include several of them (e.g. molé, a Mexican sauce, often has chocolate and fruit).

For a different sort of example, consider mammals. There are various hallmarks of being a mammal: giving birth to live young, having hair, and being warm-blooded. Some of these have exceptions. For instance, the platypus, a mammal, does not give birth to live young. Others lack exceptions. All species of mammal have hair.

When there are exceptions, I shall say that the hallmark is *defeasibly* linked to the property. So, for example, live birth is defeasibly linked to being a mammal. If not, I will say the hallmark is *indefeasibly* linked to the property. So, for example, having hair is indefeasibly linked to being a mammal.

What are the hallmarks of knowledge? I do not wish to commit myself to a particular set of properties as counting among the hallmarks of knowledge. Nonetheless, it will be helpful to give some examples of properties which one might wish to include:

- (i) Modal properties (such as safety, sensitivity, reliability, etc.)
- (ii) Support properties (such as evidential favoring, being rational, seeming true)
- (iii) Properties concerning the belief's source (being formed via perception, memory, testimony, etc. as opposed to e.g. hallucination, wishful thinking or astrology)
- (iv) Properties concerning the belief's relationship to other items of knowledge (being closed under known entailment, etc.)<sup>3</sup>
- (v) Properties concerning the belief's relationships to other attitudes (being appropriate to assert, act on, end inquiry regarding, etc.)

So far I have illustrated the notion of a hallmark through examples. But hopefully the general idea of a hallmark is now at least somewhat clear: a hallmark of a property is tightly linked to the property. As it turns out, there are a number of ways of making the notion of a “tight link” more precise. Here are some examples, focusing in on knowledge:

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<sup>3</sup>One example I have in mind here is the KK principle. Some skeptical arguments seem to implicitly rely on the KK principle (see e.g. [Stroud, 1984]), which opens the possibility that I could apply this paper's anti-skeptical strategy to address them. Thanks to an anonymous referee for suggesting I discuss this.

*Other things being equal, knowledge involves the property.* If a belief is knowledge but fails to have the property, things are not equal, and some explanation is needed.<sup>4</sup>

*Knowledge normally involves the property.* If a belief amounts to knowledge, but fails to have the property, things are abnormal.<sup>5</sup>

*It's appropriate to assume cases of knowledge have the property.* If you discover that a belief is knowledge, in the absence of further information, it is appropriate to assume it has the property.<sup>6</sup>

Because there are number of ways of making the notion of a “tight link” more precise, and because my arguments can go through with many of these, I will not commit myself to a particular one here.

## 1.2 Paradigms

To be a paradigm instance of some property, one must have all the hallmarks of that property.

So, for instance, a rich and sweet chocolate cake served at the end of the meal is a paradigm dessert; it has all the hallmarks of a dessert. Something can be a dessert without being a paradigm dessert. We have already seen several examples of this, such as bacon ice cream which lacks a dessert’s traditional flavorings.

To further understand my use of “paradigm”, we can distinguish it from some related terms.

First, “normal”. A paradigm instance of some property has all the hallmarks of that property, whereas a normal one need not. For example, a democracy has a number of hallmarks: free and fair elections, an independent press, robust protection of human rights, free speech, freedom of assembly,

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<sup>4</sup>One classic example of someone who characterized certain properties in this way is W.D. Ross [Ross, 1930]; a more recent example is Robert Audi [Audi, 1993].

<sup>5</sup>One classic example of someone who characterized certain epistemic properties in this way is Roderick Chisholm (see e.g. [Chisholm, 1957] [Chisholm, 1966]); some more recent examples include e.g. [Craig, 1990, 14], [Gerken, 2011], [Gerken, 2015], [Hannon, 2015], [Hannon, 2019, 110-3], [Hannon, Forthcoming, 27], [Pinillos, Forthcoming], [Smith, 2016].

<sup>6</sup>One classic example of someone who characterized certain epistemic properties in this way is John Pollock (see e.g. [Pollock, 1967], [Pollock, 1974]; some more recent examples include e.g. [Cohen, 2004, 484], [Pinillos, Forthcoming].

and so on. To be a paradigm democracy, one must have all of these. But arguably many normal democracies fail in one department or another.

Second, “ideal”. An ideal case of something has the best version of each of its hallmarks, but a paradigm case need not. For example, an ideal basketball player makes all her shots. A paradigm basketball player needs to be able to shoot, but she might miss occasionally.

Finally, it is worth understanding the relationship between paradigms and borderline cases. Even if something fails to be a paradigm, it need not be a borderline case. For example one of the hallmarks of being a bird is being able to fly. Because penguins lack the ability to fly, they are not paradigm birds. Even though penguins fail to be paradigm birds, this doesn’t make them a borderline case. There is no question that they are birds.

### **1.3 The paradigm response to skepticism**

As I noted in my introduction, the paradigm response to skepticism has a positive claim and a negative claim. Each of these claims concerns external world beliefs targeted by skeptical arguments. The positive claim is that they amount to knowledge. The negative claim is that they are missing some of the hallmarks of knowledge. Equivalently:

*The paradigm response to skepticism:* Certain of our external world beliefs targeted by skeptical arguments amount to knowledge, but they are not paradigm instances thereof.

Which beliefs exactly do I have in mind? As it turns out, there are some decision points here; more details in the next section.

Which hallmarks are missing? Again, different versions of the paradigm response will point to different hallmarks. And so, again, more details in a moment.

## **2 Defense of the key claims of the paradigm response to skepticism**

I think the key claims of the paradigm response to skepticism are quite plausible. I will be devoting this section to a defense of them. In addition to being a defense, this section will also help serve as an elaboration – it will

identify some key decision points for those endorsing the paradigm response to skepticism.

It will be useful to have a skeptical argument before us. What follows is one of the most widely discussed arguments for external world skepticism, often called the “Argument from Ignorance”:<sup>7</sup>

1. You don’t know you’re not a handless brain in a vat.
2. If you don’t know you’re not a handless brain in a vat, you don’t know you have hands.

Therefore

3. You don’t know you have hands.

Because the argument is valid, if you wish to deny its conclusion, you will also have to reject one of these two premises. I will consider each of these possibilities, starting with rejecting the second premise. Each time, I will argue that if you reject the premise in question, there is a plausible version of the paradigm response to skepticism.

## 2.1 Rejecting Premise 2

Suppose you wish to reject Premise 2. In other words, suppose you say that even though you don’t know you’re not a handless brain in a vat, you nonetheless know you have hands.<sup>8</sup>

In such a case, your belief fails to be closed under known entailment. That is, even though you know something and know that it entails something else, you fail to know the further thing.

In particular, (i) you know that you have hands, (ii) you know that this entails that you’re not a handless brain in a vat, but (iii) you don’t know that you’re not a handless brain in a vat.

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<sup>7</sup>For examples of discussion of this or closely related arguments, see e.g. [Atkins and Nance, 2014, 36], [Axtell, 2008, 561], [Becker, 2007, 69-70], [Black, 2002, 148], [Black, 2008, 11], [Byrne, 2004, 303], [Campbell et al., 2010, 11], [Cleve, 2008, 288], [Conee and Feldman, 2004, 279], [DeRose, 1999, 2], [Feldman, 2001, 63], [Gascoigne, 2002, 10], [Janvid, 2013], [Kraft, 2013, 66], [Leite, 2004, 336], [Leite, 2010, 40], [McGinn, 2003, 151], [Murphy, 2013, 273], [Pritchard, 2002, 217-8], [Schaffer, 2004, 139], [Sosa, 1999, 143], [Stanley, 2005, 27], [Steup, 2013], [Turri, Forthcoming], [Unger, 1975, 8], [Vahid, 2013, 243-4], [Wang, 2014, 1130].

<sup>8</sup>Examples of people who take this path include [Audi, 1985], [Dretske, 1970], [Dretske, 2005], [Nozick, 1981].

Let us focus in on this property – the property of being closed under known entailment. As I shall now argue, there is good reason to think that it is a hallmark of knowledge.<sup>9</sup>

We can see this by looking at the three ways discussed earlier of making more precise the notion of “tight link”, each of which yields a plausible statement:

*Other things being equal, knowledge involves the property.* If someone knows a proposition and knows that it entails some further proposition, then other things being equal, they know the further proposition. If they don’t, then things are not equal, and some explanation is needed.

*Knowledge normally involves the property.* If someone knows a proposition and knows that it entails some further proposition, then normally they know the further proposition. If they don’t, things are abnormal.

*It’s appropriate to assume cases of knowledge have the property.* If you discover that someone knows some proposition and knows that it entails some further proposition, in the absence of further information, it is appropriate to assume that they know the further proposition.

We have just seen one reason to accept the claim that closure under known entailment is a hallmark of knowledge: once we make this claim more precise, it seems quite intuitive.

There is another reason to accept this claim: doing so helps explain some key features of the debate surrounding the knowledge closure principle.

Here are two key features of this debate. The first is that proponents of the knowledge closure principle are extremely vociferous in their defense of it. For instance, Richard Feldman writes: “the idea that no version of this principle is true strikes me, and many other philosophers, as one of the least plausible ideas to come down the philosophical pike in recent years” [Feldman, 1995, 487].<sup>10</sup>

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<sup>9</sup>Experimental philosophy arguably seems to support my view; for discussion, see e.g. [Beebe and Monaghan, 2018], [Kraft and Wiegmann, 2018], [Turri, 2015]. Thanks to an anonymous referee for suggesting I add a note to this effect and for the citations.

<sup>10</sup>For some more quotes in a similar vein, see [Dretske, 2005, 17].

The second feature is that the knowledge closure principle, as standardly formulated, admits of counterexamples. For instance, some formulate it in such a way that it references competent deduction, for instance:

CLOSURE UNDER COMPETENT DEDUCTION. If you know  $p$  and competently deduce  $q$  from  $p$  while maintaining knowledge of  $p$ , then you know  $q$ .<sup>11</sup>

But there are a number of counterexamples to this principle. So, for instance, Joshua Schechter offers an example in which one engages in a long series of deductions, first deducing  $p_2$  from  $p_1$ , then  $p_3$  from  $p_2$ , and so on [Schechter, 2013]. He argues that, if there are enough of these deductions, then you lack knowledge in the final conclusion. After all, given the long series, you have good reason to believe that you made a mistake somewhere or other in the process.<sup>12</sup>

Some others formulate CLOSURE in terms of being in a position to know, for instance:

CLOSURE – POSITION TO KNOW. If you know  $p$  and know that  $p$  entails  $q$ , then you are in a position to know  $q$ .<sup>13</sup>

Such a principle is somewhat difficult to evaluate because “position to know” is a term of art. There are various ways to make it more precise.

One idea that comes from people like Timothy Williamson is the following: you’re in a position to know if it’s easy for you to come to know; if there’s nothing holding you back in any way [Williamson, 2000, 95].

But if we understand “position to know” in this way, then this closure principle admits of exceptions. It could be extremely difficult for you to form the new belief, or to base it in the right way.

Another way to understand the notion of being in a “position to know” is in terms of possibility; you’re in a position to know if it’s possible for you to know.<sup>14</sup>

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<sup>11</sup>See e.g. [Hawthorne, 2004, 34], [Williamson, 2000, 117]. Note that Hawthorne and Williamson are both aware of counterexamples to the principle as stated; Hawthorne notes some explicitly [Hawthorne, 2004, 34-5], while Williamson includes the hedge “in general” in his phrasing of the principle.

<sup>12</sup>For some other examples of common counterexamples to this sort of closure principle, see e.g. [David and Warfield, 2008], [Kvanvig, 2006, 261-2], [Lasonen-Aarnio, 2008].

<sup>13</sup>For similar formulations, see e.g. [Byrne, 2004, 321], [Klein, 2004, 166], [Stanley, 2005, 27], [Steup, 2005, 2], [Steup, 2013], [Wang, 2014, 1130].

<sup>14</sup>See e.g. [Heylen, 2016, 64], [Rosenkranz, 2007, 90].



But again, if we understand “position to know” in this sense, then this knowledge closure principle doesn’t hold. That is, there are cases in which you can know a proposition but it’s impossible for you to know something entailed by it. For example, suppose I know that I don’t know any disjunctive propositions. This entails the following disjunctive proposition: either I don’t know any disjunctive propositions or  $1=2$ . But it is impossible for me to know this second proposition.<sup>15</sup>

In short, it is very difficult to formulate the knowledge closure principle in a way that avoids exceptions.

How can we accommodate the idea that the knowledge closure principle is extremely plausible with the idea that it is extremely difficult to formulate a counterexample-free version? An attractive option is to hold that it is a defeasible principle. This enables us to see why knowledge closure seems importantly right and also why there seem to be exceptions to standard formulations of it.

## 2.2 Some further comments

There is a lot more that can be said regarding the claim that closure is a defeasible principle. I will wade in a little further, but those who are satisfied can safely jump to the next subsection.

First, I said that the knowledge closure principle, as standardly formulated, admits of exceptions. But this raises a question: what about non-standard versions? For instance, what about extremely subtle versions of the knowledge closure principle? Might these be true indefeasibly?<sup>16</sup>

I see no reason to say no. Compare: I think that the principle “birds fly” admits of exceptions. Might there nonetheless be an extremely subtle principle linking birds with flying? Perhaps. For instance, maybe one could formulate a lengthy principle relating birds and flying with an exception for each type of bird that cannot fly.

The reason I am happy to admit this possibility is that the existence of such a principle is perfectly consistent with the claim that being able to

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<sup>15</sup>A similar sort of point is raised in [Heylen, 2016]. Note that this sort of example also works against position-to-know closure principles where “position to know” is understood as meaning that you would know  $q$  if you competently deduced it from  $p$ . For a related view, see e.g. [McHugh, 2010]. Thanks to an anonymous referee for suggesting I discuss this.

<sup>16</sup>Thanks to an anonymous referee for raising this question.

fly is a defeasible hallmark of being a bird. All that I need for the claim that being able to fly is a defeasible hallmark of being a bird is that (i) the principle “birds fly” admits of exceptions and nonetheless (ii) there is a tight connection between being able to fly and being a bird. The existence of a subtle and complex principle relating birds and flying does nothing to rule out either (i) or (ii).

What I do want to insist on is that the existence of some subtle and complex principle relating birds and flying (if indeed it does exist) does not fully explain our attraction to the claim that birds fly. After all, if you’re anything like me, you cannot formulate this subtle principle. Nonetheless, you behave in ways that make clear your commitment to flying being a hallmark of being a bird. For instance, when you learn that the tawny frogmouth is a bird, you’re happy to infer that it can fly. Likewise, if you learn that the rhea is a flightless bird, you immediately form the belief that it’s atypical.

I hold the same set of views in the case of knowledge closure. While there may well be some subtle and complex version of knowledge closure that is counterexample-free, I find it hard to believe that the existence of such a principle, if it does indeed exist, fully explains our attraction to knowledge closure. Again, if you’re anything like me, you’ll act in ways that make clear that you are committed to closure being a hallmark of knowledge. When you’re told that John knows it’s 8 am in Sydney, you’ll happily infer that he knows it’s morning in Sydney. If you hear (i) that Brooke knows that no one has arrived at the party yet but (ii) that she doesn’t know if Samuel has arrived yet, you’ll immediately conclude there’s something abnormal about her cognitive state.

Second, I said that closure is a hallmark of knowledge. But as we have seen, when it comes to spelling out precise versions of closure, there are multiple options to choose from. Are all of them hallmarks of knowledge? Just some of them? If some, which ones?<sup>17</sup>

I’m not sure I have to commit, but my personal inclination is to say that all of them – at least when it comes to the standardly discussed versions – are hallmarks of knowledge. Given the options for spelling out the notion of a hallmark that I have laid out, this is not as strange as it initially might sound. For instance, suppose we formulate the notion of a hallmark in terms of an “other things being equal” type principle. Then holding that these

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<sup>17</sup>Thanks to an anonymous referee for raising this question.

versions of closure are hallmarks of knowledge commits us to statements like the following:

Other things being equal, if you know some proposition and this entails some further proposition, then you know the further proposition.

Other things being equal, if you know some proposition and deduce some further proposition, then you know the further proposition.

Other things being equal, if you know some proposition which entails some further proposition, then you're in a position to know that further proposition.

I see no reason why these cannot all be true. Compare: there are multiple ways to make more precise the notion that desserts are sweet. Here are some examples:

Desserts have some degree of sweetness.

Desserts are rather sweet.

Desserts have sweetness as their dominant flavor.

I see no reason to deny that all of these provide hallmarks of dessert.

### **2.3 Rejecting Premise 1**

Suppose instead that you reject Premise 1.<sup>18</sup>

1. You don't know you're not a handless brain in a vat.

In other words, suppose you endorse the following: you know you're not a handless brain in a vat.

Again, the proponent of the paradigm response to skepticism will say that your belief is missing some of the hallmarks of knowledge. Which hallmark are missing? Here, we have a number of options:

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<sup>18</sup>This is an extremely common path, often called the "Moorean" path thanks to its association with G.E. Moore; see [Moore, 1939].

*Sensitivity:* Your belief that you're a handless brain in a vat is not sensitive.

*Ruling out:* You cannot rule out the proposition that you're a handless brain in a vat.

*Method:* You have no method of coming to know that you're not a handless brain in a vat.

*Evidence:* You lack evidence that you're not a handless brain in a vat.

These options are not mutually exclusive. In other words, someone offering the paradigm response to skepticism can say that your belief that you're not a handless brain in a vat is missing multiple hallmarks of knowledge.

For brevity's sake, I will focus on just one: the case of sensitivity. The moves here are similar to those of last subsection, so I will move a little faster. This is not to deny that the cases here are subtle and invite further discussion; I just don't have space to fully discuss each in the present paper.

First, some background on sensitivity. Here is a simple definition of "sensitivity": your belief in a proposition is sensitive just in case had it been false, you wouldn't have believed it.<sup>19</sup>

There is good reason to think that sensitivity is a hallmark of knowledge. It is widely thought to be intuitively tied to knowledge and seems to explain various cases where we attribute (or fail to attribute) knowledge.<sup>20</sup> So, for example, it seems to help explain why someone who thinks their lottery ticket is going to lose doesn't know that it will lose. Had their ticket failed to be a losing ticket – i.e. by being a winning ticket – they would still have believed it was going to lose.

That said, as with closure under known entailment, there seem to be exceptions to simple principles saying this property is necessary (or sufficient) for knowledge.<sup>21</sup> Some have attempted to formulate more subtle principles relating sensitivity and knowledge so as to avoid these counterexamples. But, as with knowledge closure, this has proven difficult.

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<sup>19</sup>For one of the founding discussions regarding the relationship between sensitivity and knowledge, see [Nozick, 1981].

<sup>20</sup>See e.g. [Becker and Black, 2012, 1], [Cross, 2010, 40], [Ichikawa, 2017, 60], [Kvanvig, 2012, 107].

<sup>21</sup>See e.g. [Ichikawa, 2017, 61], [Kripke, 2011], [Pritchard, 2012, 175-6], [Sosa, 1999, 145-6], [Vogel, 2012, 134].

In short, as with knowledge closure, an attractive way to accommodate (i) the apparent tightness of the link between sensitivity and knowledge with (ii) the apparent counterexamples to simple straightforward principles relating the two is to hold that sensitivity principles are defeasible.

In short, there is good reason to think sensitivity is a hallmark of knowledge. Why think it is lacking in the case of your belief that you're not a handless brain in a vat? The reason: if you were a brain in a vat, everything would appear exactly the same, and so you would have exactly the same beliefs.<sup>22</sup>

While I have focused on sensitivity, similar things go for the other examples. Each of these seem to be hallmarks of knowledge. And each of them seems to be lacking when it comes to your belief that you are not a handless brain in a vat.

## 2.4 Putting everything together

In this section I have been arguing that the key claims that make up the paradigm response to skepticism are plausible.

I am most of the way there. I have considered two different ways of rejecting the Argument from Ignorance, each of which involved rejecting one of its two premises. I argued that no matter which of these two premises you reject, there is a version of the paradigm response to skepticism whose key claims are quite plausible.<sup>23</sup>

It perhaps goes without saying, but it seems plausible that we should reject one of these two premises. After all, if they were both true, then the Argument from Ignorance would succeed and thereby establish skepticism. So long as you think it's plausible that external world skepticism is incorrect, you should think that it's plausible that one of the two claims that make up the Argument from Ignorance is incorrect, and thus that there is a version of the paradigm response whose key claims are plausible.

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<sup>22</sup>There is some controversy here, in part stemming from Hilary Putnam's idea that if you were a brain in a vat, the content of your beliefs would be very different [Putnam, 1992]. The standard move in response is to modify the skeptical hypothesis to add in that you have recently been envatted. For some related discussion, see e.g. [Baumann, 2019], [Roush, 2010]. Thanks to an anonymous referee for suggesting I add these two additional citations.

<sup>23</sup>For example, in the the subsection devoted to the second premise, I argued that closure under known entailment is a hallmark of knowledge. So if you reject the second premise, it follows that you think our external world knowledge is violating this hallmark.

In sum, my argument in this section has had the following structure:

4. A or B
5. If A, then C
6. If B, then C
- 
7. Therefore, C.

Here, A is that Premise 1 of the Argument from Ignorance is false, B is that Premise 2 of the Argument from Ignorance is false, and C is that there is a version of the paradigm response to skepticism whose key claims are plausible.

## **2.5 Am I allowed to rely on the falsity of external world skepticism?**

My argument above relies on the claim that external world skepticism is incorrect. This move is perhaps somewhat striking. After all, the point of my paper is to respond to an argument for external world skepticism. Is it dialectically appropriate to offer a response to an argument that relies on the falsity of its conclusion?<sup>24</sup>

My answer: as I (and a number of others) see things, skeptical arguments represent a paradox.<sup>25</sup> In other words, these arguments present a number of conflicting claims, each of which seems plausible. In our case, the paradox arises because the premises of the Argument from Ignorance seem compelling, but at the same time its conclusion seems incorrect.

On this picture, the goal of responding to skepticism is to find a way out of the paradox. In the ideal solution, one would be able to retain virtually all of the judgments one had going in. But perhaps this will prove impossible and one will be forced to give up some judgment or other.

So understood, the goal of this paper is ambitious; my goal is to find a resolution of the paradox where one is able to retain virtually all of the judgments one had going in. One of these judgments is that the skeptical conclusion is incorrect. As I see things, it is a good-making feature of my response to skepticism that it can retain this judgment.

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<sup>24</sup>Thanks to an anonymous referee for flagging this concern.

<sup>25</sup>I gave a number of examples in my second footnote on page 1.

Another way of putting this sort of point is that my goal is defensive, rather than offensive. I am not trying to prove to the skeptic that we have knowledge. Rather, what is going on is that the skeptic provides an interesting argument which seem to offer compelling reasons to deny knowledge. My goal is to see how we might accommodate the force behind the skeptic's premises while at the same time denying its conclusion.

### 3 On abominable conjunctions

If what I have been arguing for so far is correct, then there is a version of the paradigm response to skepticism whose key claims are quite plausible. I have also argued that this response accommodates various key judgments, including (i) that knowledge closure principle are intuitive and (ii) that, as standardly formulated, they admit of counterexamples.

In this section, I want to argue that I can also accommodate one additional set of judgments. In particular, suppose you reject the second premise of the skeptical argument. In this case, you affirm what Keith DeRose has termed an “abominable conjunction” [DeRose, 1995, 28], namely:

You know you have hands, but you don't know you're not a handless brain in a vat.

Why is this termed an abominable conjunction? Presumably because it sounds really bad!

There are also abominable conjunctions related to the other option I discussed in my last section – denying Premise 1. If you reject that premise, you'll (arguably) be committed to the truth of conjunctions like the following:

You know you're not a handless brain in a vat, even though even if you were, you wouldn't realize it.

You know you're not a handless brain in a vat, even though you cannot rule it out.

You know you're not a handless brain in a vat, even though you have no method for coming to know this.

You know you're not a handless brain in a vat, even though you lack evidence against it.

These judgments also sound bad. For instance, David Lewis writes:

If you are a contented fallibilist, I implore you to be honest, be naive, hear it afresh. ‘He knows, yet he has not eliminated all possibilities of error.’ Even if you’ve numbed your ears, doesn’t this overt, explicit fallibilism still sound wrong? [Lewis, 1996, 550].

How can someone defending the paradigm response to skepticism accommodate these abominable conjunctions? I think the answer is as follows: invoke pragmatics. In other words, I think someone offering the paradigm response to skepticism should hold that these sentences are not literally contradictory, but instead problematic thanks to some pragmatic violation.

There are several reasons to think the badness is due to pragmatic factors.

First, I think everyone should agree that abominable conjunctions are not literally contradictory. For example, as I emphasized in my discussion of knowledge closure principles, everyone should agree that there are some exceptions to simplistic versions of the knowledge closure principle.

Let us focus in on the case at hand: “You know you have hands even though you don’t know you’re not a handless brain in a vat”. There are many reasons this conjunction could be true. Perhaps the reason is because you haven’t formed a belief that you’re not a handless brain in a vat. Or perhaps the reason is that you’ve formed a belief on a bad basis. And so on. In short, because everyone agrees that there are counterexamples to simplistic versions of closure, everyone should agree that abominable conjunctions involving closure are not literally contradictory.

Another reason to think that there is a pragmatic explanation available is that we can find similar cases in other domains that invite a pragmatic explanation. For instance:

She lied, but she acted rightly.

It’s a dessert, but it isn’t sweet.

He’s unmarried, but he isn’t a bachelor.

Each of these cases (arguably) does not involve a literal contradiction. So, with regards to the first: nearly everyone agrees that it is sometimes right to lie.<sup>26</sup> With regards to the second: health enthusiasts sometimes serve

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<sup>26</sup>For instance, it is arguably right to lie in Kant’s case where a crazy murderer shows up at your door and asks for the location of your friend [Kant, 1996].



desserts that aren't sweet. With regards to the third, the pope is unmarried but not a bachelor.

A third reason to think the badness of abominable conjunctions is pragmatic is that they can be canceled. So, for instance, consider the following sentence:

You know you have hands, but you don't know you're not a handless brain in a vat; indeed, you've never even heard of such a thing.

If the explanation of the abominableness of abominable conjunctions was semantic, this sentence would not sound acceptable. But it does.<sup>27</sup>

## 4 Conclusion

As I hope to have shown, the paradigm response to skepticism has some attractive features. Its core claims are quite plausible and it accommodates a number of our key judgments related to skepticism.

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<sup>27</sup>What pragmatic explanation should we offer? The details will, of course, depend on which premise of the skeptical argument one wishes to challenge, on exactly how one understands the notion of a tight connection, and on one's preferred views about pragmatics. But for the sake of illustration, it might be helpful to have a concrete example of how such a pragmatic explanation might go.

One option is to invoke Grice's maxim of quantity [Grice, 1989]. That maxim enjoins us to provide an appropriate amount of information. That is, we should provide neither too little information nor too much. Abominable conjunctions seem to fail this maxim; they are not sufficiently informative. In particular, they provide us with a case in which something has a property but lacks a hallmark of this property. It would be better if they added information explaining why the hallmark was absent.

Indeed, this explanation might help explain another phenomena: first-personal abominable conjunctions often sound even worse than third-personal in the case of knowledge closure. For example: "I know I have hands but not that I'm not a handless brain in a vat" sounds worse than its third-person variant "he knows he has hands but not that he's not a handless brain in a vat". Here's the explanation: it's even less clear how this first sentence could be true. Perhaps he has never heard of brains in vats. But obviously I have heard about brains in vats; I'm talking about them right now. Thus an explanation seems especially pressing. (Thanks to an anonymous referee for suggesting I discuss this first-personal case).

We can also see this point in the opposite direction: if it's very easy to guess at an explanation for knowledge closure failure, then "abominable conjunctions" won't sound abominable at all. An example: "I knew that there were 111 people attending the conference, but not that the attendees could split evenly into groups of 37."

In closing, I would like to briefly highlight an additional attraction of the paradigm response to skepticism. As I hope my examples from other domains brought out, thinking in terms of hallmarks and paradigms seems to be plausible and fruitful in a number of domains. Thus, insofar as it invokes these notions, the paradigm response to skepticism can presumably be integrated into a more general theory. This task is one among several that seems worth exploring more fully as we begin to take the paradigm response to skepticism more seriously.<sup>28</sup>

## 5 Acknowledgments

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## References

- [Atkins and Nance, 2014] Atkins, P. and Nance, I. (2014). A problem for the closure argument. *International Journal for the Study of Skepticism*, 4(1):36–49.
- [Audi, 1985] Audi, R. (1985). Deductive closure, defeasibility and scepticism: a reply to feldman. *Philosophical Quarterly*, 45(181):494–499.
- [Audi, 1993] Audi, R. (1993). *The Structure of Justification*. Cambridge University Press.

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<sup>28</sup>What are some of these other tasks? One is to settle various questions I have left open, for instance (i) what understanding of “tight link” to use (ii) what semantic theory of hallmarks and paradigms to endorse, and (iii) what additional arguments for external world skepticism to apply the paradigm response to (the underdetermination argument jumps to mind). Another is to explore new questions the paradigm response invites. For example are there any paradigm cases of knowledge at all? Or does every case of knowledge fail to be a paradigm case, for some reason or another? Thanks to several anonymous referees for raising some of these questions.

- [Axtell, 2008] Axtell, G. (2008). Virtue-theoretic responses to skepticism. In Greco, J., editor, *The Oxford Handbook of Skepticism*. Oxford University Press.
- [Baumann, 2019] Baumann, P. (2019). Brains in vats? don't bother. *Episteme*, 16:186–199.
- [Becker, 2007] Becker, K. (2007). *Epistemology modalized*. Routledge.
- [Becker and Black, 2012] Becker, K. and Black, T. (2012). The resilience of sensitivity. In Becker, K. and Black, T., editors, *The Sensitivity Principle in Epistemology*, pages 1–8. Cambridge University Press.
- [Beebe and Monaghan, 2018] Beebe, J. R. and Monaghan, J. (2018). Epistemic closure in folk epistemology. In *Oxford Studies in Epistemology: Volume Two*, pages 38–70. Oxford University Press.
- [Black, 2002] Black, T. (2002). A moorean response to brain-in-a-vat scepticism. *Australasian Journal of Philosophy*, 80(2):148–163.
- [Black, 2008] Black, T. (2008). Defending a sensitive neo-moorean invariantism. In Hendricks, V. F. and Pritchard, D., editors, *New waves in epistemology*, pages 8–27. Palgrave Macmillan.
- [Brueckner, 2008] Brueckner, A. (2008). Critical notice of john koethe's *Scepticism, knowledge and forms of reasoning*. *Philosophy and Phenomenological Research*, 76(3):733–736.
- [Byrne, 2004] Byrne, A. (2004). How hard are the skeptical paradoxes. *Noûs*, 38(2):299–325.
- [Campbell et al., 2010] Campbell, J. K., O'Rourke, M., and Silverstein, H. S. (2010). Introduction: Framing knowledge and skepticism. In Campbell, J. K., O'Rourke, M., and Silverstein, H. S., editors, *Knowledge and skepticism*, pages 1–24. The MIT Press.
- [Chisholm, 1957] Chisholm, R. M. (1957). *Perceiving*. Princeton University Press.
- [Chisholm, 1966] Chisholm, R. M. (1966). *Theory of Knowledge*. Prentice Hall.

- [Cleve, 2008] Cleve, J. V. (2008). Reid’s response to the skeptic. In Cleve, J. V., editor, *The Oxford Handbook of Skepticism*. Oxford University Press.
- [Cohen, 1988] Cohen, S. (1988). How to be a fallibilist. *Philosophical Perspectives*, 2:91–123.
- [Cohen, 2000] Cohen, S. (2000). Contextualism and skepticism. *Noûs*, 34(10):94–107.
- [Cohen, 2001] Cohen, S. (2001). Contextualism defended: Comments on richard feldman’s “skeptical problems, contextualist solutions”. *Philosophical Studies*, 103(1):87–98.
- [Cohen, 2004] Cohen, S. (2004). Knowledge, assertion, and practical reasoning. *Philosophical Issues*, 14(1):482–91.
- [Conee and Feldman, 2004] Conee, E. and Feldman, R. (2004). Making sense of skepticism. In *Evidentialism: Essays in Epistemology*. Oxford University Press.
- [Craig, 1990] Craig, E. (1990). *Knowledge and the State of Nature*. Oxford University Press.
- [Cross, 2010] Cross, T. (2010). Skeptical success. In Gendler, T. S. and Hawthorne, J., editors, *Oxford Studies in Epistemology: Volume 3*, pages 35–62. Oxford University Press.
- [David and Warfield, 2008] David, M. and Warfield, T. A. (2008). Knowledge-closure and skepticism. In Smith, Q., editor, *Epistemology: New Essays*. Oxford University Press.
- [DeRose, 1995] DeRose, K. (1995). Solving the skeptical problem. *Philosophical Review*, 104:1–52.
- [DeRose, 1999] DeRose, K. (1999). Introduction: responding to skepticism. In DeRose, K. and Warfield, T. A., editors, *Skepticism: a Contemporary Reader*. Oxford University Press.
- [Dretske, 1970] Dretske, F. (1970). Epistemic operators. *The Journal of Philosophy*, 67(24):1007–1023.

- [Dretske, 2005] Dretske, F. (2005). Is knowledge closed under entailment. In *Contemporary Debates in Epistemology*. Blackwell.
- [Feldman, 1995] Feldman, R. (1995). In defense of closure. *Philosophical Quarterly*, 45(181):487–494.
- [Feldman, 2001] Feldman, R. (2001). Skeptical problems, contextualist solutions. *Philosophical Studies*, 103:61–85.
- [Gascoigne, 2002] Gascoigne, N. (2002). *Scepticism*. Acumen.
- [Gerken, 2011] Gerken, M. (2011). Warrant and action. *Synthese*, 178:529–47.
- [Gerken, 2012] Gerken, M. (2012). Discursive justification and skepticism. *Synthese*, 189:373–394.
- [Gerken, 2015] Gerken, M. (2015). The roles of knowledge ascriptions in epistemic assessment. *European Journal of Philosophy*, 23(1):141–61.
- [Grice, 1989] Grice, P. (1989). *Studies in the Way of Words*. Harvard University Press.
- [Hannon, 2015] Hannon, M. (2015). The importance of knowledge attributions. *Philosophy Compass*, 10(12):856–66.
- [Hannon, 2019] Hannon, M. (2019). *What’s the Point of Knowledge? A Function-First Epistemology*. Oxford University Press.
- [Hannon, Forthcoming] Hannon, M. (Forthcoming). What’s the point of understanding? In *What’s the Point of Knowledge?* Oxford University Press.
- [Hawthorne, 2004] Hawthorne, J. (2004). *Knowledge and Lotteries*. Oxford University Press.
- [Heylen, 2016] Heylen, J. (2016). Being in a position to know and closure. *Thought*, 5(1):63–7.
- [Ichikawa, 2017] Ichikawa, J. J. (2017). *Contextualising Knowledge*. Oxford University Press.
- [Immerman, Forthcoming] Immerman, D. (Forthcoming). The threshold problem, the cluster account, and the significance of knowledge. *Episteme*.

- [Janvid, 2013] Janvid, M. (2013). Review of *Essays on Skepticism*. *Theoria*, 79:378–382.
- [Kant, 1996] Kant, I. (1996). On a supposed right to lie from philanthropy. In *Practical Philosophy*, pages 605–15. Cambridge University Press.
- [Klein, 2004] Klein, P. (2004). Closure matters: Academic skepticism and easy knowledge. *Philosophical Issues*, 14:165–184.
- [Kraft, 2013] Kraft, T. (2013). Sceptical scenarios are not error possibilities. *Erkenntnis*, 78:59–72.
- [Kraft and Wiegmann, 2018] Kraft, T. and Wiegmann, A. (2018). Folk epistemology and epistemic closure. In *Oxford Studies in Experimental Philosophy, Volume 2*. Oxford University Press.
- [Kripke, 2011] Kripke, S. (2011). *Philosophical troubles*, volume 1. Oxford University Press.
- [Kvanvig, 2012] Kvanvig, J. (2012). Truth-tracking and the value of knowledge. In Becker, K. and Black, T., editors, *The Sensitivity Principle in Epistemology*, pages 101–121. Cambridge University Press.
- [Kvanvig, 2006] Kvanvig, J. L. (2006). Closure principles. *Philosophy Compass*, 1(3):256–67.
- [Lammenranta, 2008] Lammenranta, M. (2008). The pyrrhonian problematic. In Greco, J., editor, *The Oxford Handbook of Skepticism*. Oxford University Press.
- [Lasonen-Aarnio, 2008] Lasonen-Aarnio, M. (2008). Single premise deduction and risk. *Philosophical Studies*, 141(2):157–173.
- [Leite, 2004] Leite, A. (2004). Skepticism, sensitivity, and closure, or why the closure principle is irrelevant to external world skepticism. *Croatian Journal of Philosophy*, 4(12):335–350.
- [Leite, 2010] Leite, A. (2010). How to take skepticism seriously. *Philosophical Studies*, 148:39–60.
- [Lewis, 1996] Lewis, D. (1996). Elusive knowledge. *Australasian Journal of Philosophy*, 74(4):549–567.

- [Malcolm, 1942] Malcolm, N. (1942). Moore and ordinary language. In Schilpp, P. A., editor, *The philosophy of G. E. Moore*, pages 345–368. Northwestern University Press.
- [McGinn, 2003] McGinn, M. (2003). Responding to the skeptic: Therapeutic versus theoretical diagnosis. In Luper, S., editor, *The Sceptics*, pages 149–163. Ashgate.
- [McHugh, 2010] McHugh, C. (2010). Self-knowledge and the kk principle. *Synthese*, 173:231–257.
- [Moore, 1939] Moore, G. E. (1939). Proof of an external world. *Proceedings of the British Academy*, 25(273-300).
- [Murphy, 2013] Murphy, P. (2013). The defect in effective skeptical scenarios. *International Journal for the Study of Skepticism*, 3(4):271–281.
- [Nozick, 1981] Nozick, R. (1981). *Philosophical Explanations*. Harvard University Press.
- [Pinillos, Forthcoming] Pinillos, N. Á. (Forthcoming). Skepticism and evolution. In Kim, B. and McGrath, M., editors, *Pragmatic Encroachment in Epistemology*. Routledge.
- [Plato, 2004] Plato (2004). *The Republic*. Hackett.
- [Pollock, 1974] Pollock, J. (1974). *Knowledge and Justification*. Princeton University Press.
- [Pollock, 1967] Pollock, J. L. (1967). Criteria and our knowledge of the material world. *Philosophical Review*, 76:28–62.
- [Pritchard, 2001] Pritchard, D. (2001). Meta-epistemological constraints on anti-sceptical theories. *Facta philosophica*, 3:85–110.
- [Pritchard, 2002] Pritchard, D. (2002). Recent work on radical skepticism. *American Philosophical Quarterly*, 39(3):215–257.
- [Pritchard, 2012] Pritchard, D. (2012). In defense of modest anti-luck epistemology. In Becker, K. and Black, T., editors, *The Sensitivity Principle in Epistemology*. Cambridge University Press.

- [Putnam, 1992] Putnam, H. (1992). Brains in a vat. In DeRose, K. and Warfield, T. A., editors, *Skepticism: a Contemporary Reader*. Oxford University Press, Oxford.
- [Rosenkranz, 2007] Rosenkranz, S. (2007). Agnosticism as a third stance. *Mind*, 116(461):55–104.
- [Ross, 1930] Ross, W. D. (1930). *The Right and the Good*. Clarendon Press.
- [Roush, 2010] Roush, S. (2010). Closure on skepticism. *The Journal of Philosophy*, CVII(5):243–256.
- [Schaffer, 2004] Schaffer, J. (2004). Skepticism, contextualism, and discrimination. *Philosophy and Phenomenological Research*, 69(1):138–155.
- [Schechter, 2013] Schechter, J. (2013). Rational self-doubt and the failure of closure. *Philosophical Studies*, 163:429–452.
- [Smith, 2016] Smith, M. (2016). *Between Probability and Certainty: What Justifies Belief*. Oxford University Press.
- [Sosa, 1999] Sosa, E. (1999). How to defeat opposition to moore. *Philosophical Perspectives*, 13:141–153.
- [Sosa, 2009] Sosa, E. (2009). *Reflective knowledge*. Clarendon Press.
- [Stanley, 2005] Stanley, J. (2005). *Knowledge and practical interests*. Clarendon Press.
- [Steup, 2005] Steup, M. (2005). Knowledge and skepticism: Introduction. In Sosa, E. and Steup, M., editors, *Contemporary Debates in Epistemology*. Blackwell.
- [Steup, 2013] Steup, M. (2013). Epistemology. *Stanford Encyclopedia of Philosophy*.
- [Stroud, 1984] Stroud, B. (1984). *The significance of philosophical scepticism*. Clarendon Press.
- [Turri, 2015] Turri, J. (2015). An open and shut case: Epistemic closure in the manifest image. *Philosophers' Imprint*, 15(2):1–18.



- [Turri, Forthcoming] Turri, J. (Forthcoming). Skeptical appeal: the source content bias. *Cognitive Science*.
- [Unger, 1975] Unger, P. (1975). *Ignorance: A Case for Scepticism*. Oxford University Press.
- [Vahid, 2013] Vahid, H. (2013). Skepticism, a priori skepticism, and the possibility of error. *International Journal for the Study of Skepticism*, 3(4):235–252.
- [Vogel, 2012] Vogel, J. (2012). The enduring problem with tracking. In Becker, K. and Black, T., editors, *The Sensitivity Principle in Epistemology*, pages 122–151. Cambridge University Press.
- [Wang, 2014] Wang, J. (2014). Closure and underdetermination again. *Philosophia*, 42:1129–40.
- [Williamson, 2000] Williamson, T. (2000). *Knowledge and its Limits*. Oxford University Press.
- [Wright, 1991] Wright, C. (1991). Scepticism and dreaming: imploding the demon. *Mind*, 100(397):87–116.