ON THE NECESSITY OF THE CATEGORIES

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Forthcoming in *The Philosophical Review*

Abstract: For Kant, the human cognitive faculty has two sub-faculties: sensibility and the understanding. Each has pure forms which are necessary to us as humans: space and time for sensibility; the categories for the understanding. But Kant is careful to leave open the possibility of there being creatures like us, with both sensibility and understanding, who nevertheless have different pure forms of sensibility. They would be finite rational beings and discursive cognizers. But they would not be human. And this raises a question about the pure forms of the understanding. Does Kant leave open the possibility of discursive cognizers who have different categories? Even if other discursive cognizers might not sense like us, must they at least think like us? We argue that textual and systematic considerations do not determine the answers to these questions and examine whether Kant thinks that the issue cannot be decided. Consideration of his wider views on the nature and limits of our knowledge of mind shows that Kant could indeed remain neutral on the issue but that the exact form his neutrality can take is subject to unexpected constraints. The result would be an important difference between what Kant says about discursive cognizers with other forms of sensibility and what he is in a position to say about discursive cognizers with other forms of understanding. Kantian humility here takes on a distinctive character.

"Thus here is a case where the common saying holds, that no answer is an answer" (A478/B506) 1

1. Introduction

The *Critique of Pure Reason* aims to explain the possibility of synthetic a priori judgment. Kant's explanation of this possibility involves certain claims about the structure of the mind. This much is straightforward. As too is the general shape of his explanation. It rests on the fact that there are two faculties to the cognitive mind, a passive faculty of sensibility and an active faculty of the understanding. Each has its own representations by means of which we relate to objects. Sensibility gives us objects by means of intuitions; we think of objects by means of concepts. Kant's explanation of the possibility of synthetic a priori judgment turns on the claim that each of these faculties has its own a priori elements. Sensibility has pure intuitions, space and time; the understanding has pure concepts, the categories. It is these a priori elements to sensibility and the understanding—their pure forms—which explain that which Kant takes to require explanation.

So far, so good. But Kant is careful to limit his claims about space and time to *human* sensibility. He is careful to leave open the possibility of creatures like us, with both sensibility and understanding, who nevertheless have different pure forms of sensibility. They would be finite rational beings and discursive cognizers. But they would not be human. And this raises a question

Our names appear in alphabetical order; all authors contributed equally. The paper derives from one written by AG and AS which was presented in Cambridge and Berlin. The final version originates in discussion between all three authors at a seminar in Oxford and was presented in Potsdam and Fribourg. Our thanks to the audiences on those occasions. For further discussion and comments, our thanks to Ralf Bader, Stefanie Grüne, Johannes Haag, Nora Kreft, Colin McLear, Paola Romero, Tobias Rosefeldt, Nick Stang, and Rob Watt. We are especially grateful to two anonymous referees whose comments have greatly improved the paper. AG acknowledges the support of a British Academy Mid-Career Fellowship. AS acknowledges the support of a Research Fellowship from the Alexander von Humboldt Foundation.

¹ References to Kant's works are given by the Academy edition volume and page number along with abbreviations that are listed at the end, except for those to the *Critique of Pure Reason* which take the standard A/B format. Translations are from the Cambridge editions listed at the end.

about the a priori element to the understanding. Does Kant likewise limit his claims about the categories to human understanding? Specifically, does he leave open the possibility of discursive cognizers—cognizers with both sensibility and understanding, i.e. with sensibly conditioned intellects—who nevertheless have different intellectual forms from our own? These are the questions that we shall pursue in this essay.

Their answers matter. Kant takes the world, in some sense, to depend on us, in some sense. But who is that 'us' on which the world depends? How much of our cognitive engagement with the world is shaped by our *human* nature, and how much by our *discursive* nature more generally? These questions get to the heart of the role humanity plays in Kant's Critical philosophy. Many of Kant's readers have taken him to be the great humanizing philosopher of the modern period. All of the questions of philosophy, he tells us, are contained within the question "What is the human being?" (JL9:25), and the Copernican turn looks to put human beings at the centre of knowledge and reality. Others have taken Kant's commitment to a truly transcendental philosophy to require a withdrawal from the level of the human being to something more universal.² The answers to our questions bear on these deeper issues.

Our aim in this essay is to make our questions precise and to show the difficulty in answering them. We proceed as follows. In §\$2–4 we examine Kant's claims about the possibility of discursive cognizers with other sensible forms and formulate structurally analogous and disanalogous claims about other intellectual forms. The result is a clear statement of two opposing positions which one might attribute to Kant. One holds that Kant leaves open the possibility of discursive cognizers with other intellectual forms; the other holds that Kant rules out such a possibility. In §\$5–6 we examine a number of textual and systematic considerations and argue that they do not settle the question of which view Kant endorses. The apparent inability of the textual and systematic considerations to settle our debate opens up an intriguing possibility: that Kant is neutral on the issue. We explore this option in §\$7–8. It indicates what would be an important asymmetry between Kant's treatment of sensible and intellectual forms. For in the case of discursive

² See Tolley, forthcoming, for discussion.

cognizers with other sensible forms, Kant thinks we cannot know whether such beings are possible. But neutrality here would involve the second-order claim that we cannot know whether we can know whether discursive cognizers with other intellectual forms are possible. In \$7 we argue that such a view is compatible with Kant's commitment to decidability in transcendental philosophy. In \$8 we argue that the exact form such neutrality can take is nevertheless constrained by Kant's commitment to a kind of luminosity principle. To put it somewhat provocatively, neutrality demands silence.

2. Sensibility and Undecidability

We start with sensibility. Sensibility is the capacity "to acquire representations through the way in which we are affected by objects" (A19/B33). This capacity is realized by means of intuitions, immediate and singular representations through which objects are given to us (A19/B33, A68/B93). Empirical intuitions relate us to objects through sensation. And they possess a form, a way of ordering the matter of intuition, which "must all lie ready for it in the mind *a priori*" (A20/B34). This is the pure form of sensibility.

Kant makes a further claim: that the pure form of human sensibility subsumes two more specific forms, space and time. But this claim is explicitly limited to human sensibility. Consider the following passages (cf. A26–7/B42–3, B71, B139, A230–1/B283):

For we cannot judge at all whether the intuitions of other thinking beings are bound to the same conditions that limit our intuition, and that are universally valid for us. (A_{27}/B_{43})

It is also not necessary for us to limit the kind of intuition in space and time to the sensibility of human beings; it may well be that all finite beings necessarily agree with human beings in this regard (though we cannot decide this) (B72)

These passages restrict the claims about space and time to human sensibility.

How should we understand Kant's remarks? There is a sense in which he is acknowledging that forms of sensibility other than our own are possible: he

is acknowledging that we cannot rule them out. This, however, is a purely epistemic matter. It would be a mistake to read Kant as saying that forms of sensibility other than our own are possible in any non-epistemic sense.³ Kant does not, here or anywhere else, assert any such thing. On the contrary, on the question whether forms of sensibility other than our own are possible in a non-epistemic sense, or more specifically whether they are possible in whatever non-epistemic sense is at stake in these passages, Kant remains explicitly and resolutely agnostic. He refuses to commit either way. "It may well be that all finite beings necessarily agree with human beings," i.e. nonspatiotemporal sensible forms may, for all we know, be impossible, "though we cannot decide this." And "we cannot judge at all whether the intuitions of other thinking beings are bound [presumably necessarily] to the same conditions that limit our intuition." What Kant commits to in these passages is an undecidability thesis: we cannot know whether or not discursive cognizers with other forms of sensibility are, in whatever sense of possibility is at stake here, possible.

Very well, what sense of possibility *is* at stake here? What kind of possibility does Kant want to leave open? Presumably not logical (i.e. conceptual) possibility. Kant says that we cannot judge or decide the matter. And presumably he thinks we *can* judge or decide whether other forms of sensibility are *logically* possible. For there seems to be no contradiction in the *concept* of a non-spatiotemporal sensibility. And there is no suggestion in Kant that the spatiotemporal form of our own sensibility is supposed to follow analytically from the defining features of sensibility as such—receptivity, passivity, and so forth. Kant would not think we need to remain agnostic about the logical possibility of a non-spatiotemporal sensibility.

Perhaps then Kant means to assert that we cannot judge or decide whether other forms of sensibility are what we might call 'formally possible', i.e. in agreement with our own sensible forms (A218/B265). But this also cannot be right. For it is trivial, and so knowable, that other forms of sensibility are not

³ Cf. e.g. Falkenstein 1995: 199, Carson 1997: 503, Van Cleve 1999: 40, Maddy 1999: 101 and 2012: 488, and Marshall 2014: 550.

in agreement with our own sensible forms. This reading likewise fails to explain why Kant thinks we are not in a position to settle the question.

We take it, then, that Kant must rather be working with some notion of *real* possibility, a kind of possibility which approximates the contemporary notion of metaphysical possibility. There are questions, of course, about how exactly to characterise such a notion of possibility. We won't pursue them here. For our purposes we can leave our talk of possibility as a placeholder for whatever kind of real possibility is appropriate in the context. Kant's claim is that we cannot know whether or not discursive cognizers with other forms of sensibility are really possible. Unless relevant, we leave this qualification implicit in what follows.

Kant holds that we cannot *judge* or *decide* whether discursive cognizers with other forms of sensibility are really possible. How should we understand these notions? We shall take them to be epistemic notions that entail our being unable to know whether discursive cognizers with other forms of sensibility are possible. But what kind of knowledge does Kant think we cannot have? There are a multitude of epistemic notions in Kant: analytic knowledge, synthetic knowledge, scientific knowledge (*Wissen*), cognition (*Erkenntnis*), perhaps others. Which of these is in play will depend in part on what kind of knowledge he thinks might otherwise be available for the possibility at issue. We cannot have analytic knowledge of real possibility (see e.g. Bxxvi; Prog. 20:325–6). But if logical possibility is a condition on real possibility, then perhaps we can have analytic knowledge of real impossibility. The issue is delicate and we return to it later. For present purposes we leave our talk of knowledge as a placeholder for whatever kind of epistemic relation (to whatever kind of real possibility) is appropriate in the context.

We are now in a position to begin to articulate our target question. Modulo the preceding, Kant's claim in the above passages is that we cannot know whether or not discursive cognizers with other sensible forms are possible. *This* undecidability thesis is not our concern in this essay. ⁵ Instead our

⁴ For general discussion see e.g. Chignell 2009 and 2012, Stang 2016, and Leech 2017. For discussion of the issue in this context, see Abaci 2019: 190ff., Kohl 2020, and Gurofsky 2020.

⁵ It is the topic of Gomes and Stephenson, forthcoming a.

concern is whether Kant endorses a symmetrical undecidability thesis about the understanding:

(UNDECIDABILITY) We cannot know whether or not discursive cognizers with other intellectual forms are possible.

This is one answer to our initial question. If Kant endorses Undecidability, then his view of discursive cognizers with other intellectual forms is perfectly on a par with his view of discursive cognizers with other sensible forms. Undecidability is equivalent to the conjunction of two claims: we cannot know that discursive cognizers with other intellectual forms are possible and we cannot know that discursive cognizers with other intellectual forms are impossible. There will then be two ways of directly opposing the view, each corresponding to the negation of one of its conjuncts. First:

(CONTINGENCY) We can know that discursive cognizers with other intellectual forms are possible.

While Undecidability leaves open the possibility of discursive cognizers with forms of understanding other than our own, Contingency positively affirms this possibility; it thereby suggests that our own intellectual forms, although necessary for us, are in some deeper sense contingent for discursive cognizers as such. Second:

(NECESSITY) We can know that discursive cognizers with other intellectual forms are impossible.

While Undecidability leaves open the possibility of discursive cognizers with forms of understanding other than our own, Necessity rules out this possibility; it suggests that our own intellectual forms are not only necessary for us but also in some deeper sense necessary for discursive cognizers as such. Contingency and Necessity are contrasting decidability theses. They are incompatible with Undecidability and with each other.

There is an alternative way of carving up the terrain. Consider an epistemic conception of possibility according to which a claim is epistemically possible

just in case it is compatible with what we can know. Both Undecidability and Contingency hold that it is epistemically possible that discursive cognizers with other forms of the understanding are really possible, while Necessity denies this. This alternative taxonomy offers a helpful framework for understanding an objection that goes back at least to Hegel: that Kant's idealism threatens to collapse into a form of subjective idealism that precisely fails to rule out this epistemic possibility. We will not assess the merits of this objection here, and since for our purposes it will be important to distinguish Undecidability and Contingency (see §4), we will continue with the current taxonomy. Our question is whether Kant endorses Undecidability, Contingency, or Necessity.

Kant's explicit undecidability thesis about the possibility of discursive cognizers with other sensible forms has provided us with the materials for distinguishing three views he might hold about discursive cognizers with other intellectual forms. But Kant's complex conception of intellectual form means that each of these views can be further segmented. To complete the taxonomic space, we turn to the understanding.

3. The Understanding

In his discussion of sensibility, Kant characterises the understanding only negatively, as a non-sensible faculty of cognition. He later gives us a positive characterization of the understanding as "a faculty for judging" or a "faculty for thinking" (A69/B94). Thinking is "cognition through concepts" (A69/B94). Concepts rest on functions and a function is "the unity of the action of ordering different representations together under a common one" (A68/B93). Putting this together, we get the idea that the role of the understanding is to order different representations under common ones. The faculty's "supreme principle" is the "unity of apperception" (B136).

⁶ See the *Science of Logic*, vol. 2, §1312, §1338; *Encyclopedia*, part 1, §42; *Lectures on the History of Philosophy*, the section on Kant, in Hegel 1968—, vols. 12, 13, 30 respectively. For some especially relevant discussion, including of similar concerns in e.g. Reinhold and Fichte, see Horstmann 1995 and 2010, Ameriks 2000 and 2015, Förster 2002, Pippin 2005, McDowell 2009: 69ff., and Houlgate 2015. See also Heidegger 1929: 50ff.

Kant's identification of an a priori element to the understanding resides in the fact that he thinks there are only certain functions of unity by means of which we can order representations in judgment. These are the logical functions of the understanding in judgment, and they are listed in the Table of Judgment (A70/B95). The table has four titles, each of which has three moments. Since "the same function that gives unity to the different representations in a judgment also gives unity to the mere synthesis of different representations in an intuition, which, expressed generally, is called the pure concept of understanding" (A79/B104–5), we are able to identify twelve pure concepts of the understanding, each corresponding to one of the logical functions of judgment and likewise organized into a table, the Table of Categories. These concepts comprise "all original pure concepts of synthesis that the understanding contains in itself *a priori*" (A80/B106).

In §2 we saw that Kant thinks we cannot know whether or not discursive cognizers with different pure forms of sensibility are possible. Kant's distinction between the Table of Judgment and the Table of Categories gives us two levels at which we might formulate a symmetrical undecidability thesis about the intellectual forms. First, we might take it to be undecidable whether discursive cognizers with different *functions of judgment* are possible. Second, we might take it to be undecidable whether discursive cognizers with different *pure concepts* are possible. Intellectual form has two aspects and thus two ways in which it might vary among discursive cognizers.

Intellectual form will be variable if either of its aspects is variable, or equivalently, it will be invariable only if both of its aspects are invariable. Thus those who think it is undecidable whether or not other discursive cognizers are possible with respect to *both* aspects of intellectual form are committed to Undecidability. Those who think that we can know *both* that discursive cognizers with other functions of judgment are impossible *and* that discursive cognizers with other pure concepts are impossible are committed to Necessity. Contingency says that we can know that intellectual form is variable, so it is equivalent to a disjunction: *either* we can know that discursive cognizers with other functions of judgment are possible *or* we can know that discursive cognizers with other pure concepts are possible.

Given the connection between Kant's two tables, we will assume throughout that if the functions of judgment are variable, then so are the pure concepts. More fully, we will assume that, if it is possible for there to be discursive cognizers with different functions of judgment, then it is possible for there to be discursive cognizers with different categories. And for the majority of our discussion, we will also assume the converse: if it is possible for there to be discursive cognizers with different categories, then it is possible for there to be discursive cognizers with different functions of judgment. This assumption is warranted by Kant's insistence on there being a kind of identity between these two aspects of intellectual form (A79/B104–5, B143). It ensures that they cannot vary independently of one another, leaving us with the same options as before. But someone *might* hold that the categories could vary while the functions of judgment remain fixed, and this could lead to mixed views. We consider that scenario explicitly in §6.

There is one further complication. In addition to distinguishing between the functions of judgment and the pure concepts, Kant also distinguishes between general logic and transcendental logic. General logic concerns "the form of thinking in general," whereas transcendental logic "has to do merely with the laws of the understanding and reason, but solely insofar as they are related to objects *a priori*" (A55–7/B79–82). The Table of Categories belongs to transcendental logic, as does the full Table of Judgment, which includes a moment of singular quantity distinct from the moment of universal quantity and a moment of infinite quality distinct from the moment of affirmative quality. But Kant sometimes talks as though a table of judgment without these third moments of quantity and quality would belong to general logic (A71–2/B96–7). And while certain laws and inference rules, like non-contradiction, modus tollens, and excluded middle, clearly belong to general logic (JL9:51–3), it is far less clear how exactly they relate to the Table of Judgment.

These observations raise a set of interesting questions about the relation of general logic to the functions of judgment and the categories. For our purposes, and given that Kant thinks of general logic as an aspect of the pure form of the understanding (A50ff./B74ff.), it raises the question of whether it provides a further level at which we can ask our question of whether Kant endorses undecidability about other intellectual forms. Specifically: does Kant think that we can know whether or not discursive cognizers with other general

logics are possible, or is he as resolutely agnostic about logical aliens as he is about sensible aliens?⁷

We will not pursue this aspect of our topic here. It is relevant if one thinks that we *can* know that discursive cognizers with other general logics *are* possible, for then—given the connections between general and transcendental logic—we should also be in a position to know that discursive cognizers with other functions of judgment and other pure concepts are possible. Such a view on general logic would all but entail Contingency. But the other stances that one might take on general logic leave open all the options on the other aspects of intellectual form. For instance, a necessity thesis about general logic does not obviously entail a necessity thesis about the categories—that would depend on the precise relation between general logic and the categories. Thus although it is related, the question of whether or not discursive cognizers with other general logics are possible is distinct from the question which is our concern here.

We are now in a position to begin evaluation of the options. Our question concerns discursive cognizers with other intellectual—i.e. judgmental and categorial—forms. We have introduced three views. Contingency holds that we can know that discursive cognizers with other intellectual forms are possible. Necessity holds that we can know that discursive cognizers with other intellectual forms are impossible. Undecidability says that we cannot know whether or not discursive cognizers with other intellectual forms are possible. Which, if any, does Kant endorse?

4. Against Contingency

We begin with a brief comment on Contingency. It holds that we can know that discursive cognizers with other intellectual forms are possible. Since Kant holds that we cannot know whether discursive cognizers with other sensible forms are possible, it is a view on which our knowledge is *not* symmetrically limited with regard to other intellectual forms. We do not think that Contingency is a plausible view. Our reasons for this will come out in the rest

⁷ For discussion, see Conant 1991, Nunez 2018, and Miguens 2020.

of the essay. In this section we just want to motivate our decision not to consider Contingency in detail alongside the other two views.

Let us start by flagging a potential confusion. We have said that Kant commits to an undecidability thesis about our sensible forms: he holds that we cannot know whether discursive cognizers with other sensible forms are possible. However it is not uncommon to ascribe to Kant the view that discursive cognizers with other sensible forms are possible. This would be an endorsement of contingency about the pure forms of sensibility. We think that the passages above do not admit of this reading. But if one did read Kant in this way, then (intellectual) Contingency would look to be the *symmetrical* view about the intellectual forms. And this is important, because some of those who have endorsed Contingency seem to be motivated by its supposed symmetry with Kant's claims about sensibility. That is, they take Contingency to be the symmetrical claim to that which Kant endorses in the passages above about the sensible forms. ⁸ But this is incorrect. Considerations about symmetry do not support ascribing Contingency to Kant.

Indeed, given Kant's commitment to undecidability about the sensible forms, it seems to us that Contingency should look dubious from the outset. If we cannot know that discursive cognizers with other *sensible* forms are possible, how could we fare *better* when it comes to knowing that discursive cognizers with other *intellectual* forms are possible? There seem to us no good reasons to think that there is something which prevents us from knowing whether there could be discursive cognizers with other sensible forms but which nevertheless presents no obstacle to our knowing that discursive cognizers with other intellectual forms are possible.

The converse does not hold: there is nothing on the face of it which is problematic about allowing that we can know more about the *impossibility* of discursive cognizers with other intellectual forms than we can about the impossibility of discursive cognizers with other sensible forms. It is only Contingency, not Necessity, which looks problematic when situated against Kant's commitment to undecidability about other sensible forms. So if you think, contra Necessity, that Kant wants to leave epistemic room for the

⁸ Cf. Van Cleve 1999: 40, Buroker 2006: 63, 100, and Waxman 2014: 285-6.

possibility of other intellectual forms, then Undecidability is the option for you. For these reasons, we will not consider Contingency any further.

5. Textual Considerations

We are left with Undecidability, the view that we cannot know whether or not discursive cognizers with other intellectual forms are possible, and Necessity, the view that we can know that discursive cognizers with other intellectual forms are not possible. We begin in this section with textual considerations. Since Contingency is off the table, we assume in what follows that considerations that tell against Necessity tell in favour of Undecidability and vice versa.

5.1 Against Necessity

We start with the following well known passage, which has often been thought to tell against Necessity:

But for the peculiarity of our understanding, that it is able to bring about the unity of apperception *a priori* only by means of the categories and only through precisely this kind and number of them, a further ground may be offered just as little as one can be offered for why we have precisely these and no other functions for judgment or for why space and time are the sole forms of our possible intuition. (B145–6; cf. Prol.4:318; C11:51)

The passage seems to say that, in the same way that we can give no explanation as to why we have the forms of sensibility that we do, so too we can give no explanation of why we have the categories and functions of judgment that we do. If we can give no explanation of these facts, then one might think that we cannot rule out the possibility of discursive cognizers whose forms of sensibility and understanding differ. This looks to contravene Necessity, which holds that we *can* rule out the possibility of discursive cognizers with other intellectual forms.⁹

⁹ See Krüger 1968 for the classic statement of this reading. See also Buroker 2006: 100.

This is a challenging passage for the proponent of Necessity but it is not decisive. The passage says that the sensible and intellectual forms are symmetric in that, in both cases, no further ground may be offered as to why we have them. But it is compatible with this symmetry that there is an asymmetry in that for which no further ground is available. In the case of the sensible forms, there is no further ground to be offered for why they are the forms of specifically *human* discursive cognition. In the case of the intellectual forms, it may be that there is no further ground to be offered for why they are the forms of discursive cognition *in general*. The passage allows such a reading.

Moreover, since the claim is that no *further* ground can be offered, we ought to look to the broader context of the passage to see what grounds have been offered up to this point. It occurs in the Transcendental Deduction, §21, which is to say as a "Remark" on the already completed first step of the Deduction. Not least, then, it occurs after the main discussion of the unity of apperception, and we may well expect that no *further* ground for the intellectual forms can be given at this stage in Kant's argument. The Necessity theorist may hold that everything which has been said already about the nature of the understanding *in general* suffices to ground our possession of these forms and no others. ¹⁰

We return to this passage in a moment. First it will be instructive to consider another set of passages that might be thought to tell against Necessity. The following from the *Prolegomena* is an example:

It would be an even greater absurdity for us not to allow any things in themselves at all, or for us to want to pass off our experience for the only possible mode of cognition of things – hence our intuition in space and time for the only possible intuition and our discursive understanding for the archetype of every possible understanding – and

¹⁰ See Wolff 1995: 177–81 for the classic statement of this response, where he points out that it also applies to two related passages (Prol.4:318; C11:51). See also Allison 2004: 135ff., 2015: 376. We return to the issue in §6. For further discussion of the Deduction in this context, see Gomes and Stephenson, forthcoming b.

so to want to take principles of the possibility of experience for universal conditions on things in themselves. (4:350–51)

This passage counsels against taking *our* forms of sensibility to be the only forms of sensibility and, correspondingly, against taking *our* form of understanding to be the only form of understanding. Again, the implication would seem to be that we should not rule out the possibility of cognizers with other forms of understanding. This would tell against Necessity.

The Necessity theorist can provide an alternative reading of this passage. It certainly does counsel against our ruling out the possibility of beings with other forms of understanding. But it is a further step to say that it counsels against our ruling out the possibility of discursive beings with other forms of understanding. And it is this latter claim which is needed if it is to be used against Necessity. An alternative construal of the passage reads it in light of those texts in which Kant distinguishes discursive from non-discursive cognition (e.g. B72, B138-9, B148-9, A252, A254-5/B309-10, A286-8/B342-4; CPJ5:405ff.; C10:130ff.). Kant is clear, across these texts, that we must allow for the possibility of non-discursive cognizers, beings for whom cognition does not depend on the cooperation of two distinct faculties, sensibility and the understanding. If there could be any such beings, then our forms of experience will not be the only possible mode of cognition of things. This is what the passage from the *Prolegomena* tells us. But to allow that is not yet to allow that there could be discursive cognizers whose understanding has different forms. The passage from the Prolegomena is silent on this further question.

This suggests a general strategy open to the Necessity theorist for reading any particular text in which it looks as though Kant is leaving room for the possibility of discursive cognizers with alternative forms of the understanding. The Necessity theorist can maintain that, properly contextualised, the passage in question only allows the possibility of *non-discursive* cognizers. And the possibility of non-discursive cognizers does not tell against the impossibility of discursive cognizers with alternative intellectual forms.

With this strategy in hand, let us now return to the first passage we discussed, about the supposed "peculiarity of our understanding" at B145–6. Here is the rest of the paragraph from which that passage is taken:

In the above proof, however, I still could not abstract from one point, namely, from the fact that the manifold for intuition must already be given prior to the synthesis of understanding and independently from it; how, however, is here left undetermined. For if I wanted to think of an understanding that itself intuited (as, say, a divine understanding, which would not represent given objects, but through whose representation the objects would themselves at the same time be given, or produced), then the categories would have no significance at all with regard to such a cognition. They are only rules for an understanding whose entire capacity consists in thinking, i.e., in the action of bringing the synthesis of the manifold that is given to it in intuition from elsewhere to the unity of apperception, which therefore cognizes nothing at all by itself, but only combines and orders the material for cognition, the intuition, which must be given to it through the object. (B145)

Far from telling against Necessity, this part of the passage *can* seem to tell in favour of the view. To be sure Kant points out that the categories have "no significance" for a *non-discursive* understanding. But his contrast class—the class of understanding for which the categories do have significance—might be interpreted as the discursive understanding in general, not the human understanding specifically. And on this interpretation, the passage supports Necessity, the view that the categories have significance for the discursive understanding in general.

5.2 Against Undecidability

We have considered passages that seem to tell against Necessity. Are there passages which seem to tell against Undecidability? Consider the following, from a little later in the Transcendental Deduction:

The pure concepts of the understanding are free from this limitation [sc. the limitation of space and time, that they are conditions of the possibility of how objects are given to us and hence apply only to

objects of experience] and extend to objects of intuition in general, whether the latter be similar to our own or not, as long as it is sensible and not intellectual. (B148)

Here Kant states that the pure concepts of the understanding extend to objects of sensible intuition in general, and one might read that as saying that any being which is given objects in sensible intuition must use the pure concepts of the understanding to think about those objects. This would seem to rule out the possibility of discursive cognizers with different pure concepts of the understanding, contrary to Undecidability.

But this is an overreach. The passage says only that all objects of sensible intuition can be thought by means of the categories. It follows that there can be no sensible objects which could not be thought by creatures possessing the categories. It doesn't follow that there could not be other creatures possessing different forms of the understanding who could similarly think all objects of sensible intuition, albeit by means of their own pure concepts. Perhaps the same objects can be thought by means of different pure concepts. So the passage is compatible with Undecidability.

A wider strategy open to Undecidability theorists can be brought out by considering a textual objection thrown up by the rest of the passage from which the above sentence is taken. Here is the whole passage:

The pure concepts of the understanding are free from this limitation and extend to objects of intuition in general, whether the latter be similar to our own or not, as long as it is sensible and not intellectual. But this further extension of concepts beyond **our** sensible intuition does not get us anywhere. For they are then merely empty concepts of objects, through which we cannot even judge whether the latter are possible or not – mere forms of thought without objective reality – since we have available no intuition to which the synthetic unity of apperception, which they alone contain, could be applied, and that could thus determine an object. **Our** sensible and empirical intuition alone can provide them with sense and significance. (B148–9)

¹¹ See Moore 2012: 122n.40 and forthcoming.

We have already considered the first sentence of the passage. But now consider what the passage says about the relation between the pure concepts of the understanding and the unity of apperception: that "they alone contain" the synthetic unity of apperception. The German ("*jene allein enthalten*") is ambiguous between two readings. Either Kant means that only the pure concepts contain the unity of apperception, or he means that the pure concepts contain only the unity of apperception. ¹² Both readings can seem to support Necessity and tell against Undecidability.

Take the first: only the pure concepts contain the unity of apperception. This means there are no other concepts which contain the unity of apperception. So it looks as though there can be no discursive cognizers—cognizers with a discursive understanding, and thus with the unity of apperception—who have other concepts containing the unity of apperception. Since for something to be a pure concept of the understanding, it must contain the unity of apperception, these pure concepts must be the only pure concepts of the understanding. Take the second reading: the pure concepts contain nothing but the unity of apperception. Now if there are discursive cognizers with different pure concepts, their pure concepts too must contain nothing but the unity of apperception. But, for Kant, facts about containment relations set the individuation conditions for concepts. 13 In particular, if concept A contains only concepts C and D, and concept B contains only concepts C and D, then concept A just is concept B. It follows that the pure concepts of other discursive cognizers would be identical to our pure concepts, contrary to the hypothesis. On either reading, the passage seems to support Necessity.

There might well be ways for the Undecidability theorist to reject one horn or other of this dilemma. Perhaps, for instance, Kant doesn't mean to invoke his notion of concept containment here, in which case the second reading might not support Necessity. But another plausible route would be to take the entire passage at B148–9 as involving a tacit relativization to *our* forms of the understanding. Note, for instance, the uses of the first-person plural

¹² Guyer and Wood, in the translation from which we have been quoting, render it in the first way. Both Kemp Smith and Pluhar render it in the second.

¹³ See Anderson 2015: 55ff.

throughout the passage, including in the final sentence. And this is important because it suggests a *general* strategy open to Undecidability theorists for reading any particular text in which it looks as though Kant is ruling out the possibility of discursive cognizers with alternative forms of the understanding and so endorsing Necessity. They can maintain that, properly contextualised, the passage in question only rules out the possibility of alternative forms of the understanding for *us*. And the impossibility of *our* possessing alternative forms of the understanding does not tell against the possibility of *other* discursive cognizers with alternative forms of the understanding. This leaves room for Undecidability, which entails that we cannot rule out such a possibility.

An important application of this strategy would be to those crucial passages in which Kant suggests that the categories and the functions of judgment are complete and can be derived from a single principle or from the faculty of the understanding itself (A68/B94, A80–81/B106–7; Prol.4.322; MFNS4:476; VM29:984). These passages support Necessity if one reads them as proposing a complete derivation from the discursive understanding in general, or from a principle that applies generally to discursive cognizers as such. For if we can show that the categories and the functions of judgment are derived in this way, then we can know that discursive cognizers with other intellectual forms are impossible.

If, however, the starting point for such a derivation is the *human* understanding specifically, then these passages are compatible with Undecidability, since they then indicate only the impossibility of human cognizers with other intellectual forms. We look at this issue in more detail in §6. But, as a start, the Undecidability theorist can point to the many passages in the Transcendental Logic where Kant talks about the human understanding specifically, passages in which, by the Necessity theorist's lights, we could reasonably expect him to be talking about the discursive understanding in general. Thus, right at the start of the Transcendental Analytic, Kant writes that he "will therefore pursue the pure concepts into their first seeds and predispositions in the *human* understanding" (A66/B91, our italics; cf. B110, A85/B117, A119, A124, B135, B139, A297–8/B353–4, A309/B366). As above, the thought is that those passages in which Kant makes his claims to derivation and completeness are more perspicuously read

as operating under a tacit restriction to our own, human understanding. After all, the same restriction is often required but not explicit in Kant's statements about sensibility, for example when he says, "In this investigation it will be found that there are two pure forms of sensible intuition as principles of *a priori* cognition, namely space and time" (A22/B36).

This bears on the relevance to our question of the various sophisticated attempts to account for the full details of Kant's claims to derivation and completeness. ¹⁴ For it is not straightforward to determine whether these accounts should even be understood as aiming to establish Necessity given that the distinctions which we have drawn in this essay have not been central to that debate. Michael Wolff (1995: 20, 58ff.), for example, claims that Kant's derivation concerns a specifically *human* understanding. ¹⁵ On the face of it, this makes Wolff's account compatible with Undecidability. His reason for the restriction, however, is the recognition that Kant is clearly not concerned to provide an account that would also capture the forms of a non-discursive intellect. That is surely correct, but our question in this essay is precisely whether Kant leaves room for something else here, namely a discursive intellect that isn't human. The import for our debate of Kant's claims to derivation and completeness depend crucially on how we are to understand his starting point.

The Undecidability theorist's strategy here is the natural counterpoint to the one we saw above for the Necessity theorist. Where the Necessity theorist appeals to Kant's frequent reference to the non-discursive intellect, the Undecidability theorist appeals to Kant's frequent reference to the human intellect. And whilst there will no doubt be other passages which are relevant to this debate, not least from the practical writings and the *Critique of the Power of Judgment*, we suspect that Undecidability and Necessity theorists will each be able to use versions of these general strategies for reconciling any problematic passage with their respective views. Textual considerations alone won't settle the dispute and we turn now to more systematic considerations.

¹⁴ See especially Reich 1992, Wolff 1995, and Schulting 2018. For critical discussion see e.g. Krüger 1968, Brandt 1991, Baumanns 1993, Longuenesse 1998 and 2005, Allison 2004: 140ff., and Lu-Adler 2018.

¹⁵ See Reich 1992: 19 and Schulting 2018: 279 for similar moments in their accounts.

For reasons of space we restrict ourselves to the theoretical philosophy, though what we say in \$\$7-8 will have broader implications.

6. Systematic Considerations

6.1 Against Necessity

We begin with a challenge for Necessity. Necessity says that we can know that other intellectual forms are impossible. But what kind of knowledge is this? It is presumably a priori. But is it synthetic or analytic? The opponent of Necessity might claim that either option looks problematic.

Suppose first that the knowledge Necessity says we can have is synthetic a priori knowledge that other intellectual forms are impossible. One of the aims of the *Critique of Pure Reason* is to explain how it is that we can have synthetic a priori knowledge in mathematics, pure natural science, and metaphysics. But Kant's explanation makes central appeal to the claim that we have two pure forms of sensibility, space and time, and he thinks that we cannot know whether these forms are common to discursive cognizers generally. *This* explanation, at least, could not account for our synthetic a priori knowledge that discursive cognizers with other intellectual forms are impossible. There therefore remains an issue about how we can have the knowledge which Necessity ascribes to us, if that knowledge is synthetic a priori.

Suppose instead, then, that the knowledge Necessity says we can have is analytic knowledge that other intellectual forms are impossible. How could analysis demonstrate the truth of the Necessity thesis? Is it plausible, for instance, that Kant thought it part of the *concept* of discursive cognition as such that discursive cognizers have these and only these pure concepts? And are we sure that analysis can demonstrate an impossibility of the relevant kind, namely a *real* impossibility?

If the Necessity thesis can be neither synthetic nor analytic, then we have a line of reasoning in support of Undecidability.

Can this dilemma be resisted? Start with the view that the knowledge involved in Necessity is synthetic a priori. Then we can have synthetic a priori

knowledge which isn't accounted for by Kant's explanation, by appeal to our pure forms of sensibility, of how it is that we can have synthetic a priori knowledge. Is this a problem? There is plausibly a range of claims that Kant makes in the *Critique* which are synthetic a priori and yet which don't seem to be accounted for by this explanation. Consider the claim that there is a distinction between intuitions and concepts. This doesn't look to be analytic, nor is it known a posteriori. Yet it plays a central role in Kant's theory. We need some account of how Kant thinks such claims are known. So if the knowledge involved in Necessity is synthetic a priori yet not subject to Kant's explanation by appeal to our pure forms of sensibility, then it does not look isolated in this regard.

This response is fine as far as it goes. But someone who takes this line either owes us an alternative explanation of the synthetic a priori knowledge that is not explained by Kant's appeal to our pure forms of sensibility or owes us a criterion for distinguishing those synthetic a priori claims which require explanation from those which do not. Either would be a substantial commitment. But consider a particular and reasonably plausible candidate: that the synthetic a priori claims which either have an alternative explanation or do not require explanation are the ones which are exclusively about our mind's representational structures. ¹⁶ This does not obviously include the claim that discursive cognizers with other intellectual forms are really impossible. So the Necessity theorist either needs to explain why it is so included or needs to provide some other criterion for distinguishing the two classes of synthetic a priori claims. The synthetic horn of the dilemma for Necessity is not indefensible. But it requires further detail and explication of some of the central doctrines of the Critical system.

Consider now the second horn, that the knowledge involved in Necessity is analytic. Would it be a problem to hold that it is *analytic* of discursive cognition as such that it involves just these and no other intellectual forms? On this view, the Necessity thesis might be thought comparable to the claim that discursive cognition involves sensibility and understanding or the claim that sensibility is passive and receptive while the understanding is active and spontaneous—perhaps these claims simply articulate the concepts in question

¹⁶ See Marshall 2014: 562–9.

or in some other way proceed from sheer analysis of the faculties in question.¹⁷ And perhaps it is similarly analytic of discursive cognition as such that it has these particular forms. Recall that Kant often suggests that the categories and the functions of judgment are complete and can be derived from a single principle or from the faculty of the understanding itself (A64/B89, A69/B94, A80–81/B106–7; Prol.4:322; MFNS4:476; VM29:984). The thought would be that this derivation is supposed to be analytic and that it turns on features of the discursive understanding in general, such as the unity of apperception or the definition of discursive judgment.

For instance, suppose that Kant thinks it analytic of discursive judgment as such that it be predicative and that its atomic form be categorical, i.e. that it involve predicating one concept of another. If this were the case, it could then be analytic that the extension of "the subject is either wholly included in or excluded from the [extension] of the predicate or is only in part included in or excluded from it" (JL9:102, original emphasis removed). Such an analysis would give us the first two moments of each of quantity and quality, alongside the first moment of relation, which together yield the Aristotelian square of opposition. Perhaps one can get from here to the full Table of Judgment and, from there, to the categories themselves—though it's worth noting that what's most novel in Kant's Table of Judgment are precisely those aspects that go beyond anything involved in the Aristotelian square of opposition, namely his inclusion of the third moments of quantity and quality, his inclusion of a distinct variable for relation with just as many moments, and his treatment of modality.¹⁸

Regardless, note that if this procedure is to support the claim that the knowledge involved in Necessity is analytic, it needs to be the case both that the starting point of the derivation be something about discursive cognizers

¹⁷ Kant distinguishes concept analysis from faculty analysis at A65/B90. This may be important, for instance because while Kant thinks we can never be apodictically certain that the analysis of a non-mathematical concept is complete (A728–30/B756–8), matters might be different for the analysis of faculties. See Wolff 1995: 6–7, 177–8 for discussion.

¹⁸ See Tonelli 1966. The trichotomous aspect of Kant's tables alone might suggest that they cannot be arrived at purely analytically since analytic division proceeds according to the principle of contradiction alone and therefore only ever yields dichotomies, whereas trichotomies come from synthetic division by first dividing but then also uniting condition and conditioned (CPJ5:197). See Wolff 1995: 164ff. for discussion.

as such *and* that the derivation proceed solely by analysis. We observed above that the Undecidability theorist might read the starting point for Kant's derivation as restricted to the human understanding specifically. But they might also deny that the derivation proceeds solely by analysis. Kant, after all, allows for synthetic derivations, understood as ones which do not proceed solely in accordance with the principle of contradiction but "by some other principle" (Disc. 8:229–30). Thus even granting that the starting point for Kant's derivation is the discursive understanding in general, if that derivation is synthetic and proceeds from a principle that, for all we can know, holds only for humans, the result would be compatible with Undecidability.¹⁹

To secure the analytic reading of the Necessity thesis, then, we would need to be sure both that Kant's starting point is not restricted to the human understanding and that his derivation proceeds solely through analysis and not by appeal to our forms of sensibility or anything else that would render the result compatible with Undecidability. Again, the point is not that the analytic reading of the Necessity thesis is implausible, just that more has to be said about the nature of the analysis and the knowledge it provides.

Would we *also* need some reassurance that, if such an analysis took the form of showing our inability to represent something, this inability had any bearing on real possibility? Isn't Kant suspicious of any general entailments between the shape of our representational capacities and the real nature of things (save in the special case of appearances)? He is. But the *only* reassurance that we need in *this* context is that logical (or conceptual) impossibility entails real impossibility—an entailment that will strike many people as incontestable, both as a principle in its own right and as a commitment of Kant's.²⁰

It is worth noting the bearing that this has on Stephen Engstrom's (1994: 379–80) appeal to Kant's claim that we can't represent any beings as thinkers except by "transference" of our own consciousness to them (A346–7/B404–5; cf. A353–4). Taking the categories to be conditions of such consciousness,

¹⁹ We discuss one such approach in §6.2 below. See Longuenesse 2005: ch.1.

²⁰ This may not be as straightforward as it appears. At least one of us thinks there is room for doubt as to whether Kant endorses any such *general* entailment. For discussion which bears on the general issues here, see Bader, forthcoming, and for some relevant remarks, see e.g. A59/B84 and A291–2/B348–9.

Engstrom concludes that we can't represent thinkers—nor therefore discursive cognizers—who possess categories other than our own. From this he infers Necessity. This argument looks especially vulnerable to the concern that our inability to represent something is one matter, the real impossibility of that thing another matter entirely. For even if we admit that there are no categories other than our own such that we can represent discursive cognizers who possess them, mustn't we keep an open mind on whether that's because there is a real possibility here that we cannot (fully) represent? We must. But Engstrom's argument, if successful, shows more than that. It shows that we can't represent discursive cognizers who possess categories other than our own. If that's right, and if it's right because of what counts as an insight achieved through analysis—we are passing no judgment on whether Engstrom's argument actually shows either of these things—then it's logically impossible for there to be such cognizers and hence, given the entailment noted above, really impossible. ²²

Return to the dilemma. The point we want to emphasize here is that both responses share a common form. The challenge to the Necessity theorist was that the Necessity thesis must be either analytic or synthetic and that neither option looks plausible. In each case, the response is to claim that what was posed as a dilemma for the Necessity theorist is really just the question of what status to give Kant's fundamental claims about the mind. And this raises a final, more general issue about the knowledge involved in Necessity. Since it is a priori knowledge, we must be able to have it, in some sense, through reflection on the forms and activities of our own mind. But, the Undecidability theorist might press, how could reflection on the form and activities of our own mind put us in a position to know anything about other discursive cognizers? The Necessity theorist owes us an account of the source and nature of the knowledge they claim we can have.

²¹ See Kitcher 2017: 169-70 and Nunez 2018: §6 for related discussion.

²² The point can be made in terms of Kant's distinction between positive and negative conceptions (e.g. at B307). Our merely being unable positively to conceive of something leaves us needing to keep an open mind as to whether there might nevertheless be a real possibility here that we cannot positively represent. Not so if we can't even form a negative conception of something, for instance because "its concept cancels itself out" (A292/B348), for then we simply have nothing in mind about which we should keep an open mind. See Nunez 2018: 1170–72 for relevant discussion.

6.2 Against Undecidability

We turn now to a set of systematic considerations against Undecidability. Consider the unity of apperception. We assume that it is common ground in our dispute that this much is shared by all discursive cognizers, since it is constitutive of what it is to have a discursive understanding. Even Undecidability theorists must accept that there is a function of the understanding which is shared by all discursive beings, namely that of ordering representations under common ones in accordance with the principle of the unity of apperception. For this is just an explication of what it is to possess a discursive understanding. And this is what we would expect a commitment to Undecidability to entail. For the same is true of sensibility: space and time might, for all we know, be peculiar to us, but Kant thinks that there is a passive, receptive function to sensibility as such that is shared by all discursive beings, simply in virtue of possessing a faculty of sensibility. In taking there to be a function of the understanding which is shared by all discursive beings, the Undecidability theorist is simply treating the two faculties on a par.

This already undermines some of the worries of the previous section. For if we can somehow know that any creature with a discursive understanding must enjoy the unity of apperception, then the same question will arise: is this knowledge analytic or synthetic? But put this to one side for a moment. We can instead ask: what is the relation between the discursive understanding in general and the forms of the understanding in particular? The Undecidability theorist accepts that there is a characterization of the understanding on which it is shared by all discursive cognizers: namely, the understanding as the unity of apperception. It is central to that characterization that it involves the function of ordering representations under common ones in accordance with the principle of the unity of apperception. And the Undecidability theorist also holds that there is a more specific characterization of human understanding which involves reference to our specific intellectual forms. The question which the Necessity theorist will push is: what explains our inability to know whether this more specific characterization applies to discursive cognizers more generally?

The Necessity theorist holds that just as we can know that the unity of apperception is invariant across discursive cognizers, so too can we know that our particular intellectual forms are invariant across discursive cognizers. For the analytic Necessity theorist, this is because our particular intellectual forms are analytically derived from the discursive understanding itself; for the synthetic Necessity theorist, it is because reflection on the mind's structure somehow suffices to show the invariance. In contrast, the Undecidability theorist thinks that we can know that the unity of apperception is shared whilst not being in a position to decide whether our particular intellectual forms are invariable. But what could explain our being able to know the invariance of the latter? The challenge for the Undecidability theorist is to explain how our being able to know of invariance at the more general level is compatible with our being unable to know of invariance at the specific level.

One way for the Undecidability theorist to respond to this worry is by noting that a symmetrical question can be posed about the pure forms of sensibility. There too we have a fundamental characterization which applies to any discursive cognizer: sensibility is a passive, receptive faculty. And we have too a characterization of *our* sensibility which, for all we know, applies only to human beings: its pure forms are space and time. One might equally ask: what explains our inability to know that this more specific characterization applies to discursive cognizers more generally? The same issue arises for both sensibility and the understanding, so where's the asymmetry? The Necessity theorist would be on stronger ground if there were a principled reason to think that there is an explanation for the undecidability of sensible variation which does not also apply to the understanding.

Another, perhaps more satisfying way for the Undecidability theorist to respond would be to rise to the challenge. Can the Undecidability theorist explain how our being able to know that the unity of apperception is invariant among discursive cognizers is compatible with our inability to know whether the same is true of our particular intellectual forms? One natural way to provide such an explanation is to find a point at which our sensible nature enters into Kant's account of those forms. This would provide an explanation of the discrepancy in the Undecidability theorist's narrative. For if it is undecidable whether our sensible forms can vary, and if those forms are

suitably implicated in an account of our intellectual forms, then it will likewise be undecidable whether these particular intellectual forms can vary even whilst it can be known that the unity of apperception is invariant.

Is there any way to enact such an approach? Consider Béatrice Longuenesse's claim that the categories "are a priori determined by 'the subjective conditions of the spontaneity of thought' (the logical functions of judgment) together with the 'first formal grounds of sensibility' (space and time)" (2005: 29, our italics).23 The basic idea here seems to be that, since the categories are rules for the synthesis of the sensible manifold, just what these rules are will be determined, in part, by the kind of sensible manifold that is to be synthesized. This will be compatible with the a priori status of the categories, so long as the aspects of our sensible nature that enter in here are likewise a priori. But the salient point for our purposes is that, on the face of it, such a view promises to give us just the sort of explanation demanded of the Undecidability theorist. For if the pure forms of sensibility are involved in the a priori determination of the categories, and if it is undecidable whether the pure forms of sensibility can vary between discursive cognizers, then it will likewise be undecidable whether the categories can vary between discursive cognizers.

Yet there are problems with appealing to Longuenesse's view in defense of Undecidability in this way. First note that such an approach would explain only why we are not in a position to know whether the categories can vary, not why we are not in a position to know whether the logical functions of judgment can vary. It would therefore not be a pure Undecidability view but rather a mixed view of the kind mooted in §3. Second, to the extent that the pure forms of sensibility are involved in the a priori determination of the categories but not the logical functions of judgment, the view faces questions about how to make sense of Kant's insistence on there being a kind of identity between the two (see especially A79/B104–5, B143). Finally, the view so employed cannot collapse into the claim that the pure forms of sensibility are involved only in the determination of the categories insofar as they are subject

²³ Cf. Longuenesse 2005: 20: "the cooperation of the understanding, as a capacity to judge, and sensibility, as a receptivity characterized by specific forms or modes of ordering, generates categories".

to a process of schematization. For the Necessity theorist will accept that our sensible nature enters into the determination of intellectual form at *this* point and can thus allow that we cannot know whether discursive cognizers with other schematized categories are really possible. In order for this approach to be of help to the Undecidability theorist, the claim must be that our sensible nature enters into an account of the categories even before they are subject to schematization.²⁴

This is not to say that Undecidability is indefensible. It may be that some other explanation can be given for our inability to know whether the particular intellectual forms can vary whilst being in a position to know that the unity of apperception cannot vary. But we can put these considerations together with those of the previous subsection to make a more general point about our debate.

Both views hold that we can know that discursive cognizers without the unity of apperception are impossible. And both views hold that we cannot know whether discursive cognizers with other sensible forms are possible. They differ as to whether we can know whether discursive cognizers with other intellectual forms are possible. What the considerations adduced in the last two subsections draw out is that Kant is committed to there being some claim about the structure of mind which we are in a position to know is really impossible. And similarly, Kant is committed to there being some claim about the structure of mind which we are not in a position to know is really possible or really impossible. A satisfying defense of either Necessity or Undecidability must cohere with these other instances of and restrictions on knowledge. That is to say, any satisfying resolution to our debate will be but one part of a more general story about Kant's account of the nature and limits of our knowledge of mind.

7. Second-Order Undecidability

Our question is whether Kant thinks it is possible to know whether or not discursive cognizers with other intellectual forms are possible. Undecidability

²⁴ See Sedgwick 2000, Allison 2012: ch.2, and Schulting 2018: ch.3 for related discussion.

is the view that we cannot know whether discursive cognizers with other intellectual forms are possible. Necessity is the view that we can know that discursive cognizers with other intellectual forms are impossible. We have argued thus far that textual and systematic considerations do not decide between these views. Each is either supported by or at least compatible with the relevant texts, each has systematic considerations which tell in its favour, and the systematic considerations which tell against each can be mitigated in plausible ways.

The apparent inability of the textual and systematic considerations to settle our debate opens up an intriguing possibility. Perhaps Kant thinks we *cannot know* which of Undecidability or Necessity is true. That would explain the lack of decisive textual support for either reading. It would explain the contrast between Kant's explicit statement of undecidability in the sensible case and his lack of explicit statement either way about the intellectual case. And it would explain why we have not identified a systematic consideration which decisively supports one view over the other. Such a view would amount to an undecidability thesis about Undecidability and Necessity themselves. It would be a *second-order* undecidability thesis. For Undecidability is an undecidability thesis and Necessity a decidability thesis.

We suggested at the end of the last section that a satisfying resolution to our debate will be but one part of a more general story about Kant's account of the nature and limits of our knowledge of mind. This holds true for the current proposal. If Kant thinks we cannot know which of Undecidability or Necessity is true, that too must fit within his more general account of our knowledge of mind. In this section and the next we draw on two such aspects of Kant's account to explore the possibility that he was neutral on the issue.

In the present section we argue that Kant's commitment to decidability in transcendental philosophy does not rule out a second-order undecidability thesis concerning Undecidability and Necessity. In the next section we argue that Kant's commitment to a kind of luminosity principle nevertheless precludes him from properly endorsing such a view. The result is not that Kant cannot remain neutral on the issue. It is that, if he does, then Kantian humility takes on a distinctive character.

Before we proceed, it will be helpful to introduce some labels. Let *Q-s* be the question of whether discursive cognizers with other sensible forms are possible. And let *Q-i* be the question of whether discursive cognizers with other intellectual forms are possible. We saw in §2 that Kant thinks we cannot know the answer to *Q-s*. Undecidability is the view that we cannot know the answer to *Q-i*. Let *Second-Order Undecidability* be the view that we cannot know whether Undecidability is true. And let *Second-Order Decidability* be the view that we *can* know this. Equivalently (given that Contingency is off the table) Second-Order Undecidability is the view that we cannot decide between Undecidability and Necessity, while Second-Order Decidability is the view that we can.

Is there anything to be said in favour of Second-Order Decidability and thus against Second-Order Undecidability? There is an important section in the *Critique* which is directly relevant to this question, namely the Fourth Section of the Antinomy of Pure Reason, entitled "The transcendental problems of pure reason, insofar as they absolutely must be capable of a solution" (A476–90/B504–18). Precisely what Kant provides in this section is a criterion for whether an issue is decidable, or equivalently for whether a question is answerable. Kant writes:

Transcendental philosophy has the special property that there is no question at all dealing with an object given by pure reason that is insoluble by this very same human reason; and that no plea of unavoidable ignorance and the unfathomable depth of the problem can release us from the obligation of answering it thoroughly and completely; for the very same concept that puts us in a position to ask the question must also make us competent to answer it, since the object is not encountered at all outside the concept. (A477/B505, our italics; cf. A763/B791)

Roughly, a question is answerable if the sheer fact that we can ask it puts us in a position to answer it. Now this criterion serves only as a sufficient condition. Failure to satisfy it doesn't *in general* make a question unanswerable. However, there is reason to think that, in the specific case of *Q-s* and *Q-i*, Kant's criterion can serve as a necessary condition too. For if either question fails to satisfy his criterion, that means that something more

than whatever is accessible to us in the sheer posing of it would be required to answer it. But what could this be? To pose either question is already to exercise the understanding and invoke our concepts of cognitive forms. And it is clear that no exercise of sensibility, whether pure or empirical, could help us answer either question—in the one case because it is about the possibility of things' being intuited in some quite different way, and in the other case because it is not about things' being intuited at all. So if either *Q-s* or *Q-i* fails to satisfy Kant's criterion, it is unanswerable.

Given his commitment to undecidability about other sensible forms, Kant must hold that whatever is accessible to us in formulating *Q-s* does not put us in a position to determine whether other sensible forms are possible—he thinks that *Q-s* fails to satisfy his criterion and is thus unanswerable. If *Q-i* likewise fails to satisfy Kant's criterion, then it is likewise unanswerable, which is to say that Undecidability holds. But if *Q-i* does satisfy Kant's criterion, then it is answerable, which is to say that Necessity holds.

This can seem to tell in favour of Second-Order Decidability and thus against Second-Order Undecidability. For surely we can know whether or not *Q-i* satisfies Kant's criterion, in which case we can decide between Necessity and Undecidability. After all, Kant thinks this is true for *Q-s*—he thinks we can know that *Q-s* is a question about possibilities that exceed whatever is accessible to us merely in asking it. But this would be too quick. In general, to have a criterion is one thing, to be able to know whether something satisfies it quite another.²⁵ And we have nothing as yet to guarantee that we can know whether *Q-i* satisfies Kant's criterion. So, as yet, there is nothing here to motivate Second-Order Decidability.

And in fact nothing here *can* motivate Second-Order Decidability. For what is at issue is whether the answer to *Q-i* lies, in Kant's words, "outside the concept." If we cannot answer *Q-i*, the reason for this must be that, even

²⁵ It is noteworthy that there is room for exegetical controversy concerning the application of this criterion to the very questions that Kant is concerned with in the broader context in which this section occurs, namely the questions that generate the four antinomies. Bird (2006: ch.26) thinks that Kant thinks these questions are all unanswerable by his criterion; Moore (2019) thinks that Kant thinks this is true only of the questions that generate the two dynamical antinomies.

though Q-i is a question about concepts, its answer does lie "outside the concept"—either because it concerns concepts other than those involved in posing it or because it concerns possibilities about the concepts involved in posing it that exceed what is thereby accessible to us. But to ask whether this is the case is simply to ask the original question of whether Undecidability or Necessity holds—the second-order issue of whether Q-i satisfies Kant's criterion collapses into the first-order issue about how to answer that question. For Necessity in effect just is the view that we can know that answering *Q-i* appeals to no more than is accessible to us in posing it, namely our own intellectual forms—it just is the view that we can know that these forms are the forms of discursive understanding as such. And Undecidability just is the view that we cannot know these things. That is to say, precisely what is at issue between Undecidability and Necessity is whether or not Q-i is a question that poses one of those "transcendental problems of pure reason" which, for the reason Kant gives, "absolutely must be capable of a solution." There is no more guarantee here that we can tell whether or not *Q-i* satisfies Kant's criterion than there is that we can bypass his criterion and tell straight off whether or not *Q-i* is answerable.

What this shows is that Kant's criterion for decidability does not rule out Second-Order Undecidability any more than it rules out (first-order) Undecidability or his commitment to undecidability regarding the possibility of other sensible forms. It thus remains open that Kant thought there was no way to settle which of Necessity or Undecidability is true.

8. Luminosity and Neutrality

Second-Order Undecidability is the view that we cannot decide between Undecidability and Necessity. To endorse it would be to maintain a position of in principle neutrality between the two views. So does Kant endorse it? In this section we will argue that Kant could not in fact do so. But this is not because neutrality is not an option for him. It is because his views on philosophical knowledge constrain the form such neutrality can take.

Our argument rests on the plausible claim that Kant would endorse a luminosity principle which states that whenever we can have philosophical knowledge, we can know that we can. Call this principle *Philosophical*

Luminosity. We give reasons for thinking that Kant endorses it below. First we explain why endorsing the luminosity of any kind of knowledge precludes endorsing second-order undecidability concerning knowledge of that kind. Our talk of endorsement here is a place-holder for some generic relation to a claim that we cannot properly stand in without knowing the claim, for instance because knowing the claim is a constitutive norm of standing in the relation to the claim. Thus the reason that endorsing the luminosity of any kind of knowledge precludes endorsing second-order undecidability concerning knowledge of that kind is that luminosity and second-order undecidability are not jointly knowable. Together they form what Sorensen (1988: 52) calls a "knowledge blindspot"—the claims themselves are consistent, but knowing them is not.

Here is why. Take knowledge whether *p* as a case in point. Luminosity entails that, if we can know whether *p*, then we can know that we can. But that is as much as to say that, given luminosity, the first-order decidability of an issue entails the corresponding second-order decidability, or equivalently, that the second-order undecidability of an issue entails the corresponding first-order undecidability. Now assume that someone knows both luminosity and the second-order undecidability of some issue. Then, by following the reasoning we just sketched, they can come to know the corresponding first-order undecidability. But no-one can know both the first- and the second-order undecidability of an issue. For knowledge is factive and the latter says that the former cannot be known. Thus our assumption was false and necessarily so. No-one can know both luminosity and the second-order undecidability of any issue. Since endorsement requires knowledge, endorsing the former precludes endorsing the latter.

So far this is a purely formal result. It has application to our topic on the assumption that the knowledge Necessity says we can have, namely knowledge that other intellectual forms are impossible, would be a case of philosophical knowledge. For this would mean that Philosophical Luminosity entails the following conditional: *if* Necessity is true, then we can know that it is true. Note that this holds regardless of whether or not Necessity *is* true and regardless of which view (if either) Kant endorses—all parties to our

²⁶ See Williamson 2000: ch.11.

dispute can accept it. And it is enough to show that endorsement of Philosophical Luminosity precludes endorsement of Second-Order Undecidability. For Second-Order Undecidability entails that we cannot know that Necessity is true, which by the above conditional would entail that it is not true. Thus no one can know both Philosophical Luminosity and Second-Order Undecidability, because that would allow them to know that Necessity is not true (via the above conditional), which Second-Order Undecidability itself says cannot be known. Kant's endorsement of Philosophical Luminosity would preclude his endorsing Second-Order Undecidability.

So does Kant endorse Philosophical Luminosity? Timothy Williamson's celebrated anti-luminosity argument begins by connecting luminosity to the view that we have "a cognitive home" in which "nothing is hidden from us... everything lies open to view" (2000: 93–4). He continues:

To deny that something is hidden is not to assert that we are infallible about it. Mistakes are always possible... The point is that, in our cognitive home, such mistakes are always rectifiable. Similarly, we are not omniscient about our cognitive home. We may not know the answer to a question simply because the question has never occurred to us. Even if something is open to view, we may not have glanced in that direction. Again, the point is that such ignorance is always removable.

Kant's account of philosophical knowledge exemplifies, remarkably closely, the one sketched by Williamson. Kant does not think we are infallible in philosophy. Indeed, he thinks that mistakes in the form of transcendental illusions are not only possible but natural (A293/B349, Avii). Nor does he think we are omniscient in philosophy. We may not know the answer to a question simply because it has never occurred to us, such as how synthetic a priori knowledge is possible (B19, A764/B792, A10; Prol.4:270). But, as we saw in the previous section, he clearly thinks that philosophy is our cognitive home, where mistakes are always rectifiable and ignorance is always removable (A476–7/B504–5). And Kant's basic reason for this view is familiar: philosophy is our cognitive home because philosophical knowledge is a kind of *self*-knowledge (Axi, Axiv, Axx, Bxviii, Bxxiii, A12–13/B26; MFNS4:472–3).

The view that philosophy is our cognitive home—that nothing in philosophy must remain hidden from us so that we can always remove ignorance and error—is in effect just the view that philosophical issues are always decidable, that we can know the answer to any philosophical question. It is not yet a statement of Philosophical Luminosity, the view that, if we can have philosophical knowledge, then we can know that we can have it. But we can close the gap by attending to the fact that Kant thinks of philosophy as our cognitive home *because* he thinks of philosophical knowledge as a form of self-knowledge. He says, for instance:

that such a system [the philosophy of pure reason] should not be too great in scope for us to hope to be able entirely to complete it, can be assessed in advance from the fact that our object is not the nature of things, which is inexhaustible, but the understanding, which judges about the nature of things, and this in turn only in regard to its *a priori* cognition, the supply of which, since we do not need to search for it externally, cannot remain hidden from us (A12–13/B26)

If the reason that we can always answer philosophical questions is that they have to do solely with the understanding and we do not have to search externally, the same will be true of questions concerning whether we can know the answers to philosophical questions. Otherwise put, if philosophical questions are answerable because they are in a certain way questions about ourselves, then questions about whether we can answer such questions will also be about ourselves in that very same way and so also be answerable. The same reasoning that motivates Kant's view that philosophy is our cognitive home would also motivate him to endorse Philosophical Luminosity.²⁷

It only remains to be shown that the knowledge Necessity says we can have, namely knowledge that other intellectual forms are impossible, would be a case of philosophical knowledge. This assumption was required to show that no one can endorse both Philosophical Luminosity and Second-Order Undecidability. But the reasoning we have just outlined to support Kant's endorsement of Philosophical Luminosity also makes clear why this should be true. For any such knowledge would be knowledge, of our own intellectual

²⁷ For further discussion and defense see Stephenson, forthcoming.

forms, that they are the forms of the discursive intellect as such, and hence would be knowledge of ourselves in just this crucial way. It would be a case of philosophical knowledge to which Philosophical Luminosity applied.²⁸

If Kant endorses Philosophical Luminosity, then, he is precluded from endorsing Second-Order Undecidability—he cannot endorse the view that we cannot decide between Undecidability and Necessity. Moreover, since the same reasoning applies to higher orders, nor can Kant endorse any higher-order undecidability thesis. And this shows that Kant cannot remain neutral on the issue by endorsing Second-Order Undecidability or any higher-order undecidability thesis.

What are the implications for the questions canvassed at the start of this essay? We have been motivated throughout by the recognition that Kant endorses an undecidability thesis about other sensible forms and the question of whether he endorses a symmetrical undecidability thesis about other intellectual forms. We have defended four main claims: first, that textual and systematic considerations do not decisively settle this question; second, that addressing the question will require a more general story about the nature and limits of our knowledge of mind; third, that Kant's criterion for decidability does not rule out neutrality on our debate; and fourth, that given his commitment to Philosophical Luminosity, Kant is not entitled to remain neutral by endorsing the claim that we cannot know which of Undecidability or Necessity is true.

Where does this leave us? There is a notable contrast between Kant's explicit statement of undecidability about discursive cognizers with other sensible

²⁸ This can be helpfully related back to the discussion in the previous section. The reason why Undecidability and Necessity differ about whether or not our ignorance concerning the answer to Q-i is remediable is that they differ about whether we can know whether or not Q-i is a question about ourselves in the relevant way. If Necessity holds, our ignorance concerning the answer to Q-i is remediable because we can know that our knowledge of our own intellectual forms is ipso facto knowledge of discursive intellectual forms as such. If Undecidability holds, our ignorance concerning the answer to Q-i is irremediable because we cannot know whether or not our knowledge of our own intellectual forms is ipso facto knowledge of discursive intellectual forms as such. Note again that our argument is independent of which of these views holds or which (if either) Kant endorses—we require only the claim that if Necessity holds, then Q-i is a question about ourselves in the relevant way, a claim which all parties can accept.

forms and his lack of explicit statement about whether we can know whether or not there could be discursive cognizers with other intellectual forms. And this, combined with the inability of other textual and systematic considerations to settle the question, might motivate the thought that Kant simply did not know which of Necessity or Undecidability was true. For it is scarcely credible that he didn't even consider the issue. And it is hardly more credible that he did consider the issue, satisfied himself that he knew which was true, but did not see fit to tell us. After all, he did both of these things for the sensible case. If Kant is ignorant about whether we can know whether or not there could be discursive cognizers with other intellectual forms, then we have an explanation for the inability of textual and systematic considerations to settle the issue.

But any such ignorance is constrained by the formal results above. For Kant is not entitled to endorse the claim that we cannot know which of Necessity or Undecidability is true, given his commitment to Philosophical Luminosity. So if it is Kant's ignorance which explains the inability of textual and systematic considerations to settle this issue, it is not the kind of ignorance which Kant can express by endorsing the claim that we *cannot* know which of Necessity or Undecidability is true. It can only be a commitment to the claim that we *do not* know which is true. Such contingent ignorance is not precluded by the above results, for we could recognize that we do not know which is true whilst remaining open to the possibility of a consideration arising which will settle the issue. For the time being we can only wait and see.

Yet there's something unsatisfactory about appealing to Kant's *contingent* ignorance to explain the inability of textual and systematic considerations to decide the matter. After all, just as Kant does not explicitly commit to either Necessity or Undecidability, neither does he explicitly state that he doesn't know which of them is true. So appealing to Kant's contingent ignorance does little better at explaining his taciturnity on this point. And more generally, as much of the preceding discussion suggests, there looks to be something odd

about contingent ignorance, or at least about self-conscious contingent ignorance, from the point of view of transcendental philosophy.²⁹

But there is another option. We have seen that Kant is not entitled to remain neutral on the issue by endorsing any higher-order undecidability thesis. In particular, he is not entitled to remain neutral by claiming to know that we cannot know which of Undecidability and Necessity is true. But this is because Philosophical Luminosity and Second-Order Undecidability cannot both be *known*. It is *not* because Philosophical Luminosity and Second-Order Undecidability cannot both be true. They can both be true. And that shows that someone could quite reasonably think, "Second-Order Undecidability probably holds. That is, we probably cannot in principle decide between Undecidability and Necessity. On pain of contradiction, I can never know that this is the case, given that I already know that Philosophical Luminosity holds. But still, I suspect that's how it is!" Such a person might even suspect that undecidability goes 'all the way up'.

This is important because it shows that there is a way in which Kant could maintain a position of in principle neutrality on the question of whether Undecidability or Necessity is true, not by endorsing the claim that it is undecidable which of them is true, but by adopting some attitude towards that claim which is not precluded by a failure to know it, or by simply saying nothing at all on the issue. To remain neutral in this way would still be to maintain an asymmetry between sensibility and the understanding, since Kant is explicit that we cannot know whether discursive cognizers with other sensible forms are possible. But this asymmetry would merely take the form of there being a limit to the claims that Kant could endorse with respect to the understanding which did not have any counterpart with respect to sensibility.

Some will see such humility as deeply Kantian. Kant, after all, expressly sets out to draw a boundary to our cognition and knowledge, and part of that project involves drawing upon modes of assent which are not undermined by

²⁹ The contrast between contingent ignorance and necessary ignorance is one to which Kant is generally very sensitive, and of which he makes a great deal (e.g. A767–9/B795–7; Prol.4:350ff.).

our being unable to know the claim in question.³⁰ Others will think that silence is the inevitable result of attempting to express the incoherence of discursive cognizers with other intellectual forms and that the difference between endorsable undecidability and unendorsable neutrality is simply the natural result of the difference between thinking about different forms of sensing and thinking about different forms of thought.

This suggests another way to resolve our puzzle. Kant does not explicitly state whether we can know whether or not discursive cognizers with other intellectual forms are possible. Nor are there textual or systematic considerations which decisively settle the question. If these observations suggest that Kant was neutral on the question, such neutrality may simply register Kant's ignorance on the topic, combined with an openness to some consideration coming along which decides the matter. But they may also register, either instead or as well, not the endorsement of the claim that we cannot know which of Undecidability or Necessity is true, but a recognition, however inchoate, of the fact that any statement of such in principle neutrality can never be known, combined with a suspicion that it is nevertheless the truth of the matter. It may be that where endorsement gives out, we can only remain silent.

³⁰ See e.g. Bxxx and Kant's account of different modes of *Fürwahrhalten* at A820–31/B848–59; cf. JL9:66–75. For discussion, see e.g. Chignell 2007a and 2007b and Buroker 2017.

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We have used the following abbreviations when referencing works in *Kants Gesammelte Schriften*. Berlin: De Gruyter and predecessors. 1900–.

C = Correspondence

CPJ = Critique of the power of judgment

Disc. = On a discovery

JL = Jäsche Logic

MFNS = Metaphysical foundations of natural science

Prog. = What real progress has metaphysics made

Prol. = Prolegomena to any future metaphysics

VM = Vigilantus Metaphysics

Translations have been from the following works in the *Cambridge Edition of the Works of Immanuel Kant* (Cambridge: Cambridge University Press):

Lectures on Logic, ed. and trans. Michael J. Young. 1992.

Critique of Pure Reason, ed. and trans. Paul Guyer and Allen W. Wood. 1997.

Lectures on Metaphysics, ed. and trans. Karl Ameriks and Steve Naragon. 1997.

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Critique of the Power of Judgment, ed. Paul Guyer, trans. Paul Guyer and Eric Matthews. 2000.

Theoretical Philosophy After 1781, ed. Henry Allison and Peter Heath, trans. Gary Hatfield, Michael Friedman, Henry Allison, and Peter Heath. 2002.

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