Kant's Neglected Alternative and the Unavoidable Need for the Transcendental Deduction

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Abstract

The problem of Kant's Neglected Alternative is that while his Aesthetic provides an argument that space and time are empirically real – in applying to all appearances – its argument seems to fall short of the conclusion that space and time are transcendentally ideal, in not applying to any things in themselves. By considering an overlooked passage in which Kant explains why his Transcendental Deduction is 'unavoidably necessary', I argue that it is not solely in his Aesthetic but more so in his Deduction where he intends to provide his argument for the transcendental ideality of space and time. His Deduction shows that space and time do not have a valid application to any things in themselves by arguing that the categories do have a valid application to everything in space and time, but that the categories do not have a valid application to any things in themselves.

Keywords: transcendental idealism, things in themselves, Aesthetic, space and time, Deduction, categories

Transcendental idealism is Kant's revolutionary thesis in metaphysics (Bxvi–xvii).¹ It states that 'objects must conform to our cognition' (Bxvi), and that 'such cognition reaches appearances only, leaving the thing in itself as something actual but uncognized by us' (Bxx). Kant distinguishes direct and indirect proofs of transcendental idealism (A506/B534). His indirect proofs are meant to display the falsity of the opposing, transcendental realist thesis that our cognition can be of things in themselves. His Antinomies provide these proofs by showing that transcendental realism entails contradictions. His direct proof, by contrast, is meant to

provide positive insight into the grounds of his transcendental idealist thesis that our cognition can be of appearances only, and not things in themselves. Interpreters commonly suppose that Kant's Aesthetic is meant to provide this proof by showing that space and time do not apply to any things in themselves.² My aim in this article is to argue that it is not solely in his Aesthetic, but more so in his Deduction where Kant intends to prove that space and time do not apply to any things in themselves. Thus I aim to show that Kant's direct proof of transcendental idealism is not provided entirely in his Aesthetic's treatment of our sensibility, but more so his Deduction's treatment of the understanding.

Here is how I proceed. I sketch the Aesthetic's argument in section 1, and raise the problem of the Neglected Alternative. The problem is that, while the Aesthetic provides an argument that space and time apply to all appearances, its argument seems to fall short of the conclusion that space and time do not apply beyond appearances to any things in themselves. In section 2 I argue that Kant deems his Deduction 'unavoidably necessary' (A87/B119) for the reason that it must solve this problem. The Deduction must prove that space and time do not have a valid application to any things in themselves. In section 3 I present my solution to the problem of the Neglected Alternative. On my solution, Kant's Deduction argues that the categories do have a valid application to everything in space and time, on one hand, but that the categories do not have a valid application to any things in themselves, on the other, from which it follows that space and time do not have a valid application to any things in themselves either. I conclude with some implications for Kant's theory of our cognitive faculties.

1. The Neglected Alternative

Kant's 1787 Aesthetic comprises Metaphysical Expositions, Transcendental Expositions and Conclusions. His Metaphysical Expositions argue that our representations of space and time are *a priori* and originally intuitions $(A_{23}-5/B_{38}-40, A_{30}-2/B_{46}-8)$. His Transcendental Expositions aim to show how this result gives us insight into the possibility of our synthetic *a priori* cognitions in geometry and mechanics $(B_{40}-1, B_{48}-9)$. He also states that our representations of space and time are the *a priori* and originally intuitions only if space and time are the *a priori* forms of our sensibility (B_{41}) . While it follows that space and time are our sensibility's *a priori* forms, Kant's Conclusions attempt to draw out two further consequences.

Kant's Conclusions state that space and time are empirically real and transcendentally ideal (A26-8/B42-4, A32-6/B49-52). What it means for space and time to be empirically real is that they apply to all appearances. For them to be transcendentally ideal means that they do not apply beyond appearances to any things in themselves. Kant's argument for their empirical reality is that, since space and time are our sensibility's *a priori* forms, and since objects can appear to us only by affecting our sensibility, space and time apply to all appearances (A27/ B43, A34-5/B50-2). The problem of the Neglected Alternative is that Kant seems to provide no further argument for the transcendental ideality of space and time. It seems that he fails to consider the possibility that space and time might apply to all appearances and also beyond appearances to at least some things in themselves, if not to all things in themselves. For, after all, why could it not be the case that objects must appear to us in space and time, and that things in themselves are in space and time too, independently of being able to appear to us?

This problem is among the most long-standing and intractable in Kant scholarship. It is first formulated by H. A. Pistorius (2000/1786). Adolf Trendelenburg (1862) raises it in the nineteenth century, as do Hans Vaihinger (1881) and Norman Kemp Smith (1918), the fountainheads of twentieth-century Kant scholarship. None of these traditional scholars proposes a solution. They criticize Kant for failing to prove the transcendental ideality of space and time in his Aesthetic.

The apparent absence of argument makes a deflationary reading of the Aesthetic's conclusion seem attractive. On a deflationary reading, although Kant holds that things in themselves are not in space and time, his Aesthetic is not meant to establish this conclusion, but some weaker conclusion instead. According to Karl Ameriks (1992), the Aesthetic does not need to prove that things in themselves are not in space and time, since even if they were, this would not give us any insight into the possibility of our synthetic *a priori* cognitions in geometry or mechanics. Lucy Allais (2010) argues that all the Aesthetic is meant to prove is that our representations of space and time are not representations of things in themselves. She explains, 'This is not a positive claim about the nature of things as they are in themselves, but about our representations: our representations of space and time do not present us with mind-independent features of reality' (Allais 2010: 70).

On Allais's interpretation, the Aesthetic argues for this weaker conclusion by showing, first, that our original representations of space and time are *a priori* intuitions, and second, that *a priori* intuitions cannot represent things in themselves. Why not? Allais contends that intuitions 'essentially involve the presence to consciousness of the particular things they represent' (Allais 2010: 70), and that things in themselves could be present to us only empirically, by affecting us – not *a priori*, independently of our experience (Allais 2010: 63). Thus, *a priori* intuitions cannot represent things in themselves, according to Allais, since *a priori* intuitions present objects to us independently of our experience, while things in themselves could be present to us only in our experience.

Does Kant offer any argument for his stronger position that things in themselves are not in space and time, on a deflationary interpretation? Ameriks and Allais appeal to Kant's indirect proofs in his Antinomies (Ameriks 1992: 337–40, Allais 2010: 48–9). Kant's First Antinomy argues that if things in themselves were in space and time, the contradiction would follow that the world is infinite in past time and unbounded in space, and that it has a beginning in time and an outer boundary in space. This is an indirect proof because it shows *that* things in themselves are not in space and time, but it does not provide any positive insight into the reason *why*.

As a result, the cost of a deflationary reading is high. A deflationary reading precludes us from any positive insight into the grounds of the transcendental ideality of space and time. And, insofar as it is because space and time do not apply to any things in themselves that our cognition cannot be of things in themselves, a deflationary reading precludes us from any positive insight into the grounds of transcendental idealism generally. A solution to the problem of the Neglected Alternative promises to disclose these grounds. It promises to teach us what makes transcendental idealism true.

Henry Allison (2004) and Desmond Hogan (2009) propose solutions. Their solutions represent two different strategies for interpreting Kant's Aesthetic as providing his direct proof. On Allison's solution, the Aesthetic shows that it would be logically impossible for space and time to apply to things in themselves. On Hogan's, the Aesthetic shows that it would be metaphysically impossible. I will briefly consider their interpretations in the remainder of this section. In the next section I will argue against their shared approach – that of interpreting Kant's Aesthetic as excluding the possibility that space and time might apply to things in themselves. Allison proposes his solution by drawing on Lorne Falkenstein's distinction (Falkenstein 1995: 184-5) among deductive, comparative and presentational orders. In a deductive order, a set of elements is given with rules for determining the subsequent elements - for example, the Fibonacci sequence. In a comparative order, the relation among the elements is determined by a property of the elements themselves. The hue of a colour, for example, can be located on the colour wheel by inspecting the colour itself. In a presentational order, the relation among the elements is determined by reference to a subject's possible experience. According to Allison, Kant's Aesthetic argues that space and time are presentational orders (Allison 2004: 130). But it would be nonsensical for a presentational order to apply to things in themselves, Allison argues, since things in themselves are defined as independent of our possible experience (Allison 2004: 129-31). Allison likens the notion of a spatiotemporal world of things in themselves to that of a 'square circle' (Allison 2012: 78). Thus, for Allison, it is logically impossible - or nonsensical – for space and time to apply to things in themselves.

A common objection to Allison's interpretation is that it trivializes transcendental idealism.³ If transcendental realism were nonsensical, then transcendental idealism would be trivially true. Hogan's solution is more appealing, since he represents transcendental realism as metaphysically impossible, rather than logically impossible.

Hogan distinguishes two sorts of unknowability: epistemic 'a-unknowability' and metaphysical 'b-unknowability' (Hogan 2009: 367-8). Something is 'a-unknowable' if a priori knowledge of it exceeds the limits our cognitive powers. For example, due to the limits of our colour vision. we cannot know how ultraviolet or infrared light looks to the naked eye. Something is 'b-unknowable', by contrast, if it lacks a determining ground through which it could be known a priori. An example is that, while we can know that it is foggy independently of experiencing the fog (and so in a certain sense a priori) by knowing that the meteorological conditions that cause fog obtain, if there were an uncaused weather event, we could not know of that event's occurrence independently of experience by knowing that its causally determining conditions obtain. Now, according to Hogan, Kant maintains that our free actions are b-unknowable features of ourselves as we are in ourselves (Hogan 2009: 368). He explains that while Christian Wolff holds that every feature of reality has a determining ground, Christian Crusius adopts a libertarian theory of freedom according to which our free actions lack determining grounds, and Kant 'endorses Crusius's thesis' (Hogan 2009: 371).

Yet, according to Hogan, Kant's Aesthetic argues that space and time are determining grounds of all features of all things in space and time (Hogan 2009: 372–3). It follows that space and time must not apply to any features of any things in themselves, since if they did, then all features of all things in themselves would be deterministic, and hence, no features of any things in themselves could be b-unknowable – in contradiction to Kant's libertarian theory of freedom (Hogan 2009: 373–8).

An objection to Hogan's interpretation is that although he represents transcendental realism as metaphysically impossible, he does so by a detour through Kant's practical philosophy. He interprets Kant as assuming Crusius's libertarian theory of freedom in his Aesthetic's proof of the transcendental ideality of space and time. But Kant does not mention freedom at all in his Aesthetic, let alone Crusius. Moreover, Kant abjures practical considerations in his theoretical proofs. He writes, '[C]onsiderations ... directed to the concept of freedom ... should not be regarded as interpolations which might serve ... to fill up gaps in the critical system of speculative reason' (*Critique of Practical Reason*, 5: 7). A more appealing solution would represent transcendental realism as metaphysically impossible, but do so by adducing theoretical considerations only.

2. The Unavoidable Need for the Transcendental Deduction

Allison's and Hogan's shared approach to the problem of the Neglected Alternative is to interpret Kant's Aesthetic as providing his direct proof of the transcendental ideality of space and time, by excluding the possibility that space and time might apply to any things in themselves. I will now argue that it is not solely in Kant's Aesthetic, but more so in his Deduction where he intends to provide this proof.

Kant's Deduction aims to prove that the categories – our *a priori* forms of the understanding, such as the concepts of substance and cause – are objectively valid. To do so, he aims to justify our application of the categories to all appearances. And he aims to limit our valid application of the categories to appearances, by showing that the categories do not have a valid application to any things in themselves.

Kant stresses the 'unavoidable necessity' of his Deduction by writing:

[T]he reader must be convinced of the unavoidable necessity of [the Deduction] before he has taken a single step in the field of pure reason; for he would otherwise proceed blindly, and after much wandering around would still have to return to the ignorance from which he had begun. (A88/B121)

Why does Kant deem his Deduction 'unavoidably necessary'? He explains why in the middle of the following passage, which I will call his 'unavoidable necessity' passage:

We have above traced the concepts of space and time to their sources by means of a transcendental deduction ... Geometry nevertheless follows its secure course ... without having to beg philosophy for any certification ... of its fundamental concept of space. Yet, the use of the concept in this science concerns only the external world of the senses, of which space is the pure form of its intuition, and in which therefore all geometrical cognition is immediately evident because it is grounded on intuition a priori ... With the *pure concepts of the understanding*, however, there first arises the unavoidable need to search for the transcendental deduction not only of them but also of space, for since they speak of objects not through predicates of intuition and sensibility but through those of *a priori* thinking, they relate to objects generally without any conditions of sensibility; and since they are not grounded in experience and cannot exhibit any object in a priori intuition ... they not only arouse suspicion about the objective validity and limits of their use but also make the concept of space ambiguous by inclining us to use it beyond the conditions of sensible intuition, on which account a transcendental deduction of it was also needed above. (A87-8/B119-21)

Kant begins and ends this passage by referring to his Aesthetic as a 'transcendental deduction' of space and time. But his main point is that his Transcendental Deduction is 'unavoidably necessary' because of a problem that arises regarding our application of space and time to things in themselves. What is the problem? Kant explains that while space considered on its own – as it is in geometry – 'concerns only the external world of the senses', the categories seem to have a justified application to things in themselves. But as a result of the categories seeming to have a justified application to things in themselves, Kant explains, space – now considered in relation to the categories – becomes 'ambiguous', by coming to seem to have a justified application not only to all appearances

but also 'beyond the conditions of sensible intuition' to things in themselves too. Although Kant does not discuss time in detail, we can assume that the same considerations apply, *mutatis mutandis*. Thus, Kant's main point in his 'unavoidably necessary' passage is that his Deduction is needed to prove that space and time are not 'ambiguous', by showing that, in addition to applying to all appearances, space and time do not also apply beyond appearances to any things in themselves. This is why he claims that his Deduction must provide a 'transcendental deduction not only of [the categories] but also of space [and time]'.

How does this count against Allison's and Hogan's interpretations? Allison and Hogan interpret Kant's Aesthetic as wholly excluding the possibility that space and time might apply to things in themselves – by showing either its logical or metaphysical impossibility. Either way, the Aesthetic would prevent any problem regarding our application of space and time to things in themselves from arising in the Deduction. But it is precisely because such a problem does arise that Kant deems his Deduction 'unavoidably necessary'. He explains that the seemingly valid application of the categories to things in themselves makes space and time 'ambiguous', by making it seem as though space and time have a valid application not only to all appearances but also to things in themselves. If his Aesthetic had already proved that space and time could not possibly apply to things in themselves, space and time could not seem to have a valid application to things in themselves in the Deduction. As a result, space and time could not become 'ambiguous' in the Deduction, and there could not be any need for the Deduction to prove that space and time do not have a valid application to things in themselves. Allison's and Hogan's interpretations, therefore, cannot countenance Kant's reason for deeming his Deduction 'unavoidably necessary'. They cannot recognize any sense in which the Deduction needs to provide a 'transcendental deduction not only of [the categories] but also of space [and timel'.

A diametrically opposed interpretation would read the Aesthetic as leaving completely open the possibility that space and time might have a valid application to things in themselves. This would be unsatisfactory for a number of reasons. First, it would not do justice to Kant's Aesthetic, where he draws the conclusion that space and time are transcendentally ideal. Second, it would not do justice to the beginning and end of Kant's 'unavoidable necessity' passage, where he refers to the Aesthetic as a transcendental deduction of space and time. Finally, it would not fully do justice the main claim in Kant's 'unavoidable necessity' passage, namely, that the seemingly valid application of the categories to things in themselves makes space and time 'ambiguous'. 'Ambiguous' is the translation of *zweideutig*, which perhaps more clearly connotes 'two interpretations'. For space and time to seem to have two interpretations, it is not enough that our single representations of space and time seem to have two applications: to appearances and also to things in themselves. More so, there must seem to be two different representations of space and of time: one that is a representation of appearances, and another that seems to represent things in themselves.

A satisfactory interpretation must therefore find a middle ground between these two opposed interpretations. It must distinguish, on one hand, a sense in which the Aesthetic is meant to prove the transcendental ideality of space and time, and on the other hand, a sense in which the Aesthetic does not wholly exclude the possibility that space and time might have a valid application to things in themselves, and in which the Deduction is needed to prove that space and time are transcendentally ideal. Moreover, a satisfactory interpretation must distinguish two representations of space and time: one that represents appearances, and another that seems to represent things in themselves. The key to my interpretation will be distinguishing our *a priori* intuitions of space and time, on one hand, and our concepts of space and time, on the other.

Let us first consider the sense in which the Aesthetic is meant to prove the transcendental ideality of space and time. Recall that Allais interprets the Aesthetic as arguing not for the strong conclusion that things in themselves are not in space and time, but instead for the weaker conclusion that our representations of space and time are not representations of things in themselves. The Aesthetic does so, on Allais's interpretation, by showing that our original representations of space and time are *a priori* intuitions, and that a priori intuitions cannot represent things in themselves. Again, this is because a priori intuitions present their objects to us independently of experience, while things in themselves could be present to us only in our experience. Now Allais's interpretation affords us a clear sense in which the Aesthetic is meant to prove the transcendental ideality of space and time, without excluding the possibility that things in themselves might be in space and time. The Aesthetic is meant to prove that our original, *a priori* intuitions space and time do not apply to things in themselves. But this leaves open the possibility that in addition to our original, *a priori* intuitions of space and time, we have other, subsequent representations of space and time that do apply to things in themselves.

Indeed, Kant grants that we have concepts of space and time, in addition to our *a priori* intuitions of them. In the Aesthetic itself, he refers to our concepts of space and time in the titles of his Metaphysical and Transcendental Expositions (B37, B40, B46 and B48). He refers to our concepts of space and time again in articulating the aims of these sections. A Metaphysical Exposition, he states, provides 'the distinct ... representation of that which belongs to a concept' so as to 'exhibit the concept as given a priori' (B38). A Transcendental Exposition provides 'the explanation of a concept as a principle from which insight into the possibility of other synthetic a priori intuitions can be gained' (B40). In the Aesthetic's arguments too, Kant refers to our concepts of space and time. In his argument that space is originally an intuition, he writes, '[Space] is essentially single; the manifold in it, thus also the general concept of spaces in general, rests merely on limitations' (A25/B39). Finally, in his 'unavoidable necessity' passage itself, Kant states that the seemingly justified application of the categories to things in themselves makes 'the concept of space' seem to have a justified application to things in themselves (A88/B120-1). Is this compatible with the Aesthetic's argument that space and time are originally intuitions? What it means for space and time to be originally intuitions is that our first representations of space and time are intuitions, not concepts. This is indeed compatible with our having concepts of space and time other than and subsequent to our original, a priori intuitions.

This distinction between our *a priori* intuitions of space and time, on one hand, and our concepts of space and time, on the other, affords us a clear sense in which the Aesthetic does not wholly exclude the possibility that space and time might apply to things in themselves, and in which the Deduction is needed to prove the transcendental ideality of space and time. While the Aesthetic is meant to prove that our *a priori* intuitions of space and time do not apply to things in themselves, it leaves open the possibility that our concepts of space and time might have a valid application to things in themselves. The Deduction must then prove that our concepts of space and time do not have a valid application to things in themselves. This is what makes the Deduction 'unavoidably necessary'. By proving that our concepts of space and time do not have a valid application to things in themselves, the Deduction will be able to show that space and time are not 'ambiguous' - or *zweideutig* - by showing that in addition to our *a priori* intuitions of space and time that do not represent things in themselves, we do not have other representations of space and time - our concepts of space and time - that do represent things in themselves. The Deduction will provide a transcendental deduction of space and time, then, in the sense that it will show that none of our representations of space and time apply to any things in themselves – in addition to our *a priori* intuitions of space and time that do not apply to things in themselves, our concepts of space and time do not have a valid application to things in themselves either.

But what motivates the problem here? Why does it seem in the Deduction that our concepts of space and time represent things in themselves, when in the Aesthetic it has already been proved that our original, *a priori* intuitions of space and time do not represent things in themselves? What makes space and time seem 'ambiguous' – *zweideutig* – in the first place? Kant offers some explanation of this in his 'unavoidable necessity' passage. He states that the seemingly justified application of the categories to things in themselves makes our concepts of space and time seem to have a justified application to things in themselves? And why does the seemingly justified application of the categories to things in themselves? And why does the seemingly justified application of the categories to things in themselves to have a justified application of the categories to things in themselves? And why does the seemingly justified application of the categories to things in themselves make our concepts of space and time seem to have a justified application to things in themselves? And why does the seemingly justified application of the categories to things in themselves make our concepts of space and time seem to have a justified application to things in themselves too?

In his 'unavoidable necessity' passage, Kant refers to the contrast between concepts and intuitions to explain why the categories seem to have a valid application to things in themselves, while our *a priori* intuitions of space and time do not. He states that 'geometry concerns only the external world of the senses ... because it is grounded on intuition a priori'. The categories seem to have a valid application to things in themselves, by contrast, because they 'relate to objects generally' and 'cannot exhibit any object in *a priori* intuition'. As we saw from Allais's interpretation, *a* priori intuitions cannot represent things in themselves because they present objects to us independently of our experience, while things in themselves could be present to us only in our experience. A priori concepts, by contrast, do not present objects to us. Instead, they represent common marks that can be borne by various possible objects - not only appearances but also (at least in principle) things in themselves. This is why the categories - as a priori concepts - can seem to represent things in themselves, while our *a priori* intuitions of space and time cannot.

Kant gives a richer account of this in his discussion of transcendental illusion $(A_{295}-6/B_{351-2})$. There, he claims not merely that the categories mistakenly seem to have a valid application to things in themselves, before it has been proved that they do not. More so, he claims that even after this has been proved, reason's own principle gives rise to the

illusion that the categories have a valid application to things in themselves. How so? Kant explains that reason is the capacity to draw inferences, whereby we cognize particulars through universals (A299-300/ B_{355-7}). For example, we cognize that Socrates is mortal by identifying his condition of humanity and the universal principle that all humans are mortal. In so doing, reason orders the understanding's cognitions, such that more conditioned cognitions are represented as entailments of more unconditioned ones (A302/B359). Kant claims that reason seeks higher and higher universals in pursuing this order (A 305-6/B362-3). Instead of representing Socrates's mortality as a consequence of his humanity and Felix's mortality as a consequence of his felinity, we represent both as a consequence of a more universal condition, such as life. Kant claims that it would not be rational for us to pursue higher and higher universals for every particular, unless we proceeded upon the principle that every particular is conditioned by a complete series of higher and higher universals (A₃₀₇-8/B₃₆₄). Since such complete series could not be objects of our possible experience, reason's principle requires us to represent things in themselves. And, since Kant maintains that reason does not give rise to its own concepts but instead requires us to use the categories in representing things in themselves $(A_{408}-9/B_{435}-6)$, there arises the transcendental illusion that the categories have a rationally justified application to things in themselves.

Now why does the seemingly justified application of the categories to things in themselves make our concepts of space and time seem to have a justified application to things in themselves too? Why does it do so, even after the Aesthetic has proved that our original, *a priori* intuitions of space and time do not apply to things in themselves? Kant does not offer any further explanation of this in his 'unavoidable necessity' passage. But consider: How can we represent things in themselves under the categories without representing them in space and time? How can we represent a substance, for example, without representing it as persisting through space and over time? How can we represent things as cause and effect, without representing them as contiguous in space and successive in time?⁴

We can substantiate this line of questioning by considering Kant's discussion of space and time in his Antinomies (A411-13/B438-40). He argues that, as a result of the transcendental illusion that the categories of quantity have a valid application to things in themselves, space and time come to seem to have a valid application to things in themselves too. Regarding time, Kant argues that we can represent a quantified moment of time as present only by representing the preceding moment as having passed. But to represent the preceding moment as having passed, the moment before that must be represented as having already passed. And so on. Kant distinguishes this infinite series of past time – as ascending – from the infinite series of future time, which is descending. While it is possible to represent infinitely many future moments in time, it is not necessary. But it is necessary to represent infinitely many past moments as having elapsed, prior to representing a quantified moment as present. Likewise regarding space, to represent a quantified region of space, another region must be represented as its outer boundary. And so on. Now since these infinite, ascending series of spaces and times are not objects of our possible experience but rather things in themselves, reason's requirement that we represent things in themselves under the categories of quantity results in the rational requirement that we represent things in themselves in space and time too.

This discussion of transcendental illusion allows us to appreciate a deeper sense in which the Deduction is 'unavoidably necessary'. It is not just that the Deduction is needed to correct our naïve mistake of applying space, time and the categories to things in themselves, before it has been proved that this application is invalid. More so, even after it has been proved that the categories do not have a valid application to things in themselves, we inevitably must apply them to things in themselves. And even after it has been proved that space and time do not have a valid application to things in themselves, as a result of inevitably must apply them to things in themselves, as a result of inevitably applying the categories of quantity to things in themselves. The Deduction is needed, therefore, not just to correct a naïve mistake of ours – which may or may not arise, and which might be corrected once and for all – but to check a necessary transcendental illusion, which can never be extirpated from reason.

In this section, I have argued that while Kant's Aesthetic is meant to prove that our *a priori* intuitions of space and time do not apply to things in themselves, his Aesthetic leaves open the possibility that our concepts of space and time might have a valid application to things in themselves, and that his Deduction is needed to finally exclude this possibility. In this way, I have argued that Kant's direct proof of the transcendental ideality of space and time is provided not entirely in his Aesthetic, but more so in his Deduction. It is more so in his Deduction, since it is in his Deduction where Kant finally excludes the possibility that any of our representations of space and time might have a valid application to things in themselves. I will conclude this section by distinguishing two issues that have been conflated in the literature. One issue is whether Kant's Aesthetic is meant to prove that things in themselves are not in space and time. Traditional interpreters criticize Kant for failing to prove this. But I have argued that no such proof is needed in his Aesthetic. Because the Aesthetic treats our sensibility, it considers space and time on their own – independent of the categories. It argues that our original representations of space and time are *a priori* intuitions, and that they do not represent things in themselves.

The problem of the Neglected Alternative is another matter, however. This issue is whether Kant ever considers the possibility that space and time might have a valid application not only to all appearances but also beyond appearances to things in themselves. I have argued that the need to exclude precisely this possibility is Kant's very reason for deeming his Deduction 'unavoidably necessary'. Because the Deduction treats the understanding, it considers space and time in relation to the categories. And because the seemingly valid application of the categories to things in themselves makes our concepts of space and time seem to have a valid application to things in themselves too, the Deduction must prove that our concepts of space and time do not have a valid application to things in themselves. Thus, while Allison and Hogan interpret Kant's Aesthetic as wholly excluding the possibility that space and time might have a valid application to things in themselves, I have argued that Kant's Deduction is meant to finally exclude this possibility.

My interpretation thus agrees with Allais's deflationary reading of Kant's Aesthetic, but disagrees on the problem of the Neglected Alternative. I agree with Allais that all Kant's Aesthetic is meant to prove is that our original, *a priori* intuitions of space and time do not apply to things in themselves. But Allais interprets Kant as providing no direct proof of the strong conclusion that things in themselves are not in space and time, only the indirect proof in his first Antinomy. I have argued that Kant's Deduction must provide the direct proof by showing that, in addition to our *a priori* intuitions of space and time do not apply to things in themselves, our concepts of space and time do not have a valid application to things in themselves either. Thus, while Allais provides no solution to the problem of the Neglected Alternative, I have argued that the Deduction must contain the solution. I will now reconstruct its proof to provide that solution.

3. The Transcendental Deduction

Kant formulates his Deduction's problematic by considering: on what grounds can our representations relate to objects? He writes,

There are only two possible cases in which synthetic representation and its objects can come together, necessarily relate to each other, and, as it were, meet each other: Either if the object alone makes the representation possible, or if the representation makes the object possible. If it is the first, then this relation is only empirical ... But if it is the second, then since representation in itself (for we are not here talking about its causality by means of the will) does not produce its object as far as its *existence* is concerned, the representation is still determinant of the object *a priori* if it is possible through it alone to *cognize something as an object*. (A92/B124–5)⁵

Here, Kant states that our representations can relate to objects in either of two possible ways: by the objects making our representations possible, or by our representations making their objects possible. He states that objects can make our empirical representations possible, but that the categories cannot derive from objects, since they are *a priori* concepts. Our practical concepts, he states, can make things in themselves possible by bringing them into existence, but since the categories are theoretical concepts they cannot produce their objects.⁶ He concludes that the categories can relate to objects only by making it possible for appearances to be objects of our possible cognitions.

There is an ambiguity in this formulation, however. Does Kant aim only to show that the categories are required for subjects such as ourselves to cognize appearances? Or does he aim to show that the categories are required for appearances to be objects of our possible cognitions in the first place? Decisive evidence for the latter is Kant's opposition to Humean scepticism (B127–8). Kant characterizes his Humean sceptical opponent not as denying that we do or even that we must apply the categories in our experience, but instead as maintaining that the categories are merely 'subjectively necessary' and unjustified (B127). Kant's sceptical opponent maintains that, although we must apply the categories in our experience, the reason we must do so is merely because of the way our minds are constituted.⁷ Kant's aim is to prove, to the contrary, that the reason we must apply the categories is that they are required for our experience to be of objects at all.⁸

Kant's 1787 Deduction comprises two arguments. His first aims to show that the categories are required for our experience to be of objects of apperceptively synthesized intuitions – that is, intuitions of which we can become self-consciously aware. His second argument aims to show that the categories are required for our experience to be of objects in space and time.⁹ I will focus my discussion on Kant's treatment of judgement in his first argument, and his claim that space and time are objects of our formal intuitions in his second.

Kant criticizes 'the logicians' for defining judgement as a relation of concepts (B140). His primary objection is that this definition leaves it undetermined 'wherein this relation consists' (B141). For Kant, judgements are indeed relations of concepts, but so too are associations of ideas. Associations are 'subjective' relations of concepts, while judgements are 'objective' (B141). The question is: what makes judgements 'objective' for Kant?

Paul Guyer (1987) offers an interpretation that sets too high a bar. He writes, 'Kant defines *judgement* precisely as a claim to *knowledge of an object*, where such a claim is in turn nothing other than the claim that several predicates *necessarily* belong to one another' (Guyer 1987: 119). This would make all judgements into claims to know necessary truths (Guyer 1992: 148). But Kant explicitly repudiates this interpretation, writing, '[T]o be sure, I do not mean to say that these representations *necessarily* belong to one another, but rather that they belong to one another *in virtue of the necessary unity* of the apperception in the synthesis of intuitions' (B142). What is necessary, on Kant's definition of judgement, is not that certain concepts be related in the judgements, but that the intuitions in virtue of which the concepts are related be apperceived. What is necessary, in other words, is that the intuitions be able to be self-ascribed.

Béatrice Longuenesse (2005), by contrast, sets the bar too low. On her interpretation, judgements are objective in that they relate 'to an object represented as distinct from our representation of it' (Longueuesse 2005: 32). While this would allow for contingently true and false judgements, it fails to distinguish judgements from mere associations of ideas. For, surely, associated ideas can relate to objects distinct from the representations of them. We need an interpretation on which judgements are not all necessarily true but rather possibly true or false, and yet are distinguished from mere associations.

My suggestion is that what makes judgements objective is that the objects to which they relate serve as reasons for them. Associations are merely subjective, by contrast, because the objects to which they relate are at most their causes, not their reasons. Thus, Kant's claim that the concepts related in a judgement 'belong to one another in virtue of the necessary unity of the apperception in the synthesis of intuitions' means that the concepts related in a judgement are related for the reason that certain representations are combined in apperceptively synthesized intuitions of objects - that is, intuitions of objects of which we can become selfconsciously aware. For example, my relation of the concepts 'red' and 'rectangle' will amount to the judgement 'This rectangle is red' if my reason for relating these concepts in this way is that I take myself to have an intuition of this red rectangle. My judgement will be true if the object of my intuition is in fact a red rectangle, and false otherwise. But in a mere association, I relate the concepts 'raven' and 'writing desk', for example, without any apperceptively synthesized intuition serving as my reason. Perhaps some intuition – perhaps even some apperceptively synthesized intuition - may cause me to associate these ideas, but in an association I have no apperceptively synthesized intuition that serves as my reason. As a result, my association lacks a truth-value altogether. Kant's first argument concludes that the categories are required for our experiences to be of objects of apperceptively synthesized intuitions. His argument relies on the implicit premise that objects of my apperceptively synthesized intuitions can serve as the reasons for my judgements, only if they have the same forms as judgements, which are the categories.

Let us now turn to Kant's second argument. Why does he need a second argument? Recall that Kant's Humean sceptical opponent maintains that the categories are merely 'subjectively necessary', and not required of appearances themselves for them to be objects of our possible experience. After Kant has argued that the categories are required for appearances to be objects of our apperceptively synthesized intuitions, the sceptic can respond that the apperceptive synthesis is a merely subjective requirement for us to make judgements, and not needed for objects simply to be present to our senses. Kant's Aesthetic might even seem to provide materials for this sceptical response. Since the Aesthetic argues that the objects of our sensible intuitions are represented in space and time, the sceptic can maintain that space and time are all that is required for objects to be present to our senses, and that the categories are a merely subjective requirement for us to make judgements. Kant's answer to the sceptic must show that the categories are required simply for objects to be present to our senses in space and time.

Kant's key claim is that space and time are represented as objects of our formal intuitions. He writes, '[S]pace and time are represented *a priori* not merely as forms of sensible intuition, but also as intuitions themselves (which contain a manifold), and thus with the determination of the unity of this manifold in them' (B160). He continues in a footnote:

Space, represented as *object* (as is really required in geometry), contains more than the mere form of intuition, namely the *comprehension* of the manifold given in accordance with the form of sensibility in an *intuitive* representation, so that the *form of intuition* merely gives the manifold, but the *formal intuition* gives unity of the representation. (B160 n.)

This passage is contested in the conceptualism/non-conceptualism debate. Conceptualists interpret Kant as claiming that space and time themselves require the categories, and therefore that objects require the categories for being in space and time (Longuenesse 2005: 37). Non-conceptualists respond that this contradicts Kant's Aesthetic, where he argues that space and time are originally intuitions, not concepts (Allais 2009: 387–8, McLear 2015: 87–8). According to non-conceptualism, Kant's Deduction argues that the categories are required for representing space and time *as objects*, and hence for representing objects in space and time *themselves*, nor for representing objects in space and time *themselves*, nor for representing objects in space and time *themselves*, Tolley 2013: 122–3, McLear 2015: 90).

The problem with non-conceptualism, however, is that it fails to capture Kant's answer to his sceptical opponent in his Deduction's second argument. Recall that the sceptical response to the Deduction's first argument is that, although the categories may be required for the apperceptive synthesis, this is a merely subjective requirement for us to make judgements, and not a requirement for objects to be present to our senses. All that is required for objects to be present to our senses, according to this sceptical response, is that they be represented in space and time. But on the non-conceptualist interpretation, again, all Kant's second argument aims to show is that the categories are required for representing space and time *as objects*, and hence for representing space and time *themselves*, nor for representing objects in space and time *simpliciter*. This leaves open the sceptical position that, though the categories may be required for representing spatiotemporal objects, this is

a merely subjective requirement for us to make judgements, and not needed for objects to be present to our senses.

Still, conceptualists must answer the non-conceptualists' objection. Their objection is that conceptualism contradicts the Aesthetic's argument that space and time are originally intuitions, not concepts. Consider: What makes space and time require the categories, according to conceptualism? According to Longuenesse's conceptualist interpretation, space and time require the categories for their 'unity, unicity and infinity' (Longuenesse 2005: 34-5). But these are among the same features Kant cites in his Aesthetic to argue that space and time are originally intuitions, not concepts. He cites their singularity, whole-to-part unity, infinity and homogeneity (A24-5/B39-40, A31-2/B47-8). His Aesthetic's argument relies on the implicit premise that these features of space and time can be represented only in an intuition, not by a concept. This premise would indeed be undermined, if Kant's Deduction were to argue that the categories can represent the singularity, whole-to-part unity, infinity and homogeneity of space and time. Indeed, it would contradict the Aesthetic's premise if the Deduction were to argue that the categories are required for representing these features of space and time – as on Longuenesse's conceptualism. To answer the non-conceptualists' objection, then, we need a novel conceptualist interpretation: one that identifies features of space and time that Kant cites in his Deduction to prove that space and time require the categories, other than their singularity, unity, infinity and homogeneity, which his Aesthetic cites to argue that space and time are originally intuitions, not concepts.

My suggestion is that what makes space and time require the categories, for Kant, is their objectivity. Kant's above-cited footnote asks us to consider what is 'really required in geometry'. Geometry proceeds by spatial construction in pure intuition. For example, the proof that the internal angles of a triangle sum to two right angles proceeds by exhibiting a triangle, extending the baseline, drawing a parallel line to one of the legs and comparing the constructed angles. Various questions can be asked about how this is possible. One question is how our geometrical judgements can be synthetic judgements – which add to our concepts – without adding material from empirical intuitions. Another is how they can be *a priori* judgements – which are necessary and universal – when we construct particular figures with arbitrary dimensions. Recall, Kant's Aesthetic answers these questions by appealing to the result that our original representations of space and time are *a priori* intuitions (A25/ B40–1, A31–2/B46–9). The question at issue in the Deduction, by contrast, is how our geometrical judgements can count as objective judgements in the first place. Judgements are objective, according to Kant's first argument in the Deduction, in that the objects to which they relate serve as the reasons for them. The question, then, is what object (or objects) provides the reasons for our geometrical judgements? Kant's answer is space itself. He states that what is 'really required in geometry' is that space be 'represented as object'. Our spatial constructions in pure intuition provide the reasons for our geometrical judgements.

Although Kant's footnote does not ask us to do so, we may consider what is 'really required' in mechanics. A difference between our representations of space and of time, for Kant, is that we can represent space itself directly, while we can represent time only by drawing a line in space and attending to our action of drawing it (B154-5). Nevertheless, there is a crucial similarity. Just as geometry proceeds by spatial construction in pure intuition, mechanics proceeds by temporal construction in pure intuition.¹⁰ And, just as our geometrical judgements count as objective judgements because they are rationally based on our intuitive representation of space, so too are our mechanical judgements objective because they are rationally based on our intuitive representation of time. Kant's second argument, then, is that the categories are required for objects to be in space and time, since space and time themselves provide the reasons for our geometrical and mechanical judgements, and objects can provide the reasons for our judgements only if they have categorial form. This answers Kant's sceptical opponent, since it shows that the categories are not a merely subjective requirement for us to make judgements. The categories are required for objects to be present to our senses, since objects are present to our senses in space and time, and the categories are required for objects to be in space and time.¹¹

I can now present my solution to the problem of the Neglected Alternative. Kant's proof that space and time do not have a valid application to any things in themselves proceeds in two steps. First, he argues that the categories do not have a valid application to any things in themselves. He does so in formulating his Deduction's problematic. He argues that there are no possible grounds on which the categories could relate to things in themselves. His argument is that there are two possible ways in which our representations could relate to objects: by objects making our representations possible, or by our representations making their objects possible. But the categories cannot be made possible by objects – as our empirical representations can, by deriving from them – since they are *a priori* concepts. And neither can the categories make things in themselves possible – as our practical concepts can, by producing them – since they are theoretical concepts. Thus, because the categories are *a priori* theoretical concepts, there are no possible grounds on which they could relate to things in themselves. The categories, therefore, cannot have a valid application to any things in themselves.

Kant's second step is to argue that the categories do have a valid application to everything in space and time. Here, his argument is that, since space and time are represented as objects in our formal intuitions – which provide the reasons for our judgements in geometry and mechanics – the categories are required for space and time themselves, and hence for objects to be in space and time. From this, it follows that if any things in themselves were in space and time, then the categories would be required for those things in themselves. In other words, if space and time were to have a valid application to any things in themselves, then the categories would have to have a valid application to those things in themselves too. Since Kant has already argued that the categories cannot have a valid application to any things in themselves, it now follows that space and time do not have a valid application to any things in themselves either. This, then, is my solution to the problem of the Neglected Alternative:

- P1. If space and time were to have a valid application to any things in themselves, the categories would have to have a valid application to those things in themselves too.
- P2. The categories cannot have a valid application to any things in themselves, since there are no possible grounds on which the categories – as *a priori*, theoretical concepts – could relate to things in themselves.
- C. Space and time do not have a valid application to any things in themselves.

An objection to my interpretation might be that, while I address the epistemological question whether there is any justification for our application of space, time and the categories to any things in themselves, I fail to address the properly metaphysical question whether any things in themselves are spatial, temporal or categorial. According to this objection, even if there are no epistemic grounds to justify our application of the categories to any things in themselves, there is still a metaphysical possibility that some things in themselves are categorial. And, even if our application of space and time to some things in themselves were to result in our unjustified application of the categories to those things in themselves, there is a metaphysical possibility that some things in themselves are spatial and temporal.

To answer this objection, we must recognize that, when Kant speaks of 'grounds', he is speaking not solely in an epistemic register, but equally in a metaphysical one. When he asks on what grounds the categories can relate to objects, he is asking not solely what epistemic grounds can justify our application of the categories to objects, but equally what metaphysical grounds can make it possible for objects to be categorial. There are no bare possibilities, for Kant. Just as there must be epistemic grounds for our judgements, so too must there be metaphysical grounds for possibilities. For something to be really possible - not just logically conceivable – there must be something that makes it possible.¹² Given this, if Kant can argue that there are no grounds on which the categories could relate to any things in themselves, he may conclude that no things in themselves can be categorial. This is precisely what he does in developing his Deduction's problematic. He argues that because the categories are *a priori* theoretical concepts, there are no possible grounds on which they could relate to things in themselves. From this, it follows that things in themselves cannot be categorial. And, given Kant's argument that things in themselves would have to be categorial if they were spatiotemporal, it follows that they cannot be spatiotemporal either.

4. Conclusion

In this article, I have proposed a new solution to the problem of the Neglected Alternative. While interpreters commonly assume that Kant's direct proof of transcendental idealism is provided by his Aesthetic's proof that space and time do not apply to any things in themselves, I have argued that it is not solely in his Aesthetic but more so in his Deduction where Kant intends to provide this proof.

I said above that a solution to the problem of the Neglected Alternative should reveal the reason that space and time do not apply to any things in themselves, and the reason for transcendental idealism generally. Regarding space and time specifically, I agree with Hogan that it would be metaphysically impossible for them to apply to things in themselves, not logically impossible as for Allison. But on my solution, the metaphysical impossibility is not due to practical considerations of freedom, as on Hogan's. It is due to theoretical considerations of grounds. Space and time do not have a valid application to any things in themselves, on my interpretation, because the categories do have a valid application to everything in space and time, but do not have a valid application to any things in themselves. The categories have a valid application to everything in space and time because space and time are objects of our formal intuitions, which provide the rational grounds for our judgements in geometry and mechanics. The categories do not have a valid application to any things in themselves because there are no grounds on which the categories – as *a priori* theoretical concepts – could relate to any things in themselves.

Regarding transcendental idealism generally, while the common interpretation is that our cognition cannot be of any things in themselves because space and time do not have a valid application to any, my solution reveals a more fundamental reason. Space and time do not have a valid application to any things in themselves because the categories do have a valid application to everything in space and time, yet do not have a valid application to any things in themselves.

I will now conclude by briefly drawing out some implications for Kant's theory of our cognitive faculties. Consider the sense in which our sensibility is passive and receptive, for Kant, and the sense in which the understanding is spontaneous and self-determining. One sense in which our sensibility is passive is that our intuitions are received through objects affecting our sensibility. But my interpretation reveals another, deeper sense. It is that our sensibility's limits are not determined by its own forms of space and time, but instead by the categories of the understanding. Confirmation of my interpretation is in the following passages: 'Sensibility and its field ... are ... limited by the understanding, in that they do not pertain to things in themselves' (A251) and 'The understanding ... bounds sensibility ... in warning sensibility not to presume to reach for things in themselves but solely for appearances' (A288/B344).

As for the understanding, one sense in which it is spontaneous is that our concepts relate to objects not by being passively received, but rather by our actively making judgements. A deeper sense – which my interpretation reveals – is that the understanding's limits are self-determined by its own categorial forms. Confirmation of this is in the following passage: '[O]ur understanding ... is not limited by sensibility, but rather limits it' and 'it also immediately sets boundaries for itself' (A256/B312). Thus, for Kant, the reason the spatiotemporal forms of our sensibility apply to

appearances only, and the fundamental reason our cognition is of appearances only, is that the categories of the understanding have a valid application to appearances only, and not to any things in themselves.¹³

Notes

- I References to Kant's first Critique are in A/B pagination. I rely on the translation in Kant 1998a and consult the original in Kant 1998b. References to Kant's other works are in Akademie pagination. I cite his Critique of Practical Reason as in Kant 1996, Metaphysical Foundations of Natural Science as in Kant 2004, and his Letter to Herz as in Kant 1999.
- 2 Prominent examples include Karl Ameriks (1990, 2003, 2006), Henry Allison (1996, 2012), Robert Adams (1997) and Lucy Allais (2010, 2011, 2015).
- 3 For prominent formulations of this objection, see Guyer (1987), Langton (1998), Van Cleve (1999) and Allais (2004, 2015)
- 4 Kant adduces similar lines of reasoning at (A242-4/B300-2) and in his Critique of Practical Reason (5: 137).
- 5 An earlier formulation of this problem is in Kant's 1772 Letter to Herz (10: 130-1).
- 6 In his 1772 letter to Herz, Kant also states that God's concepts bring their objects into existence, while our finite, theoretical concepts cannot do so (10: 130).
- 7 Kant criticizes a Leibnizian pre-established harmony theory for granting 'precisely what the sceptic wishes most' (B168). His criticism is that whether we must apply the categories because of the way our minds are constituted by habit, or because of the way our minds are constituted by God – either way, our application of the categories would be merely subjectively necessary and unjustified.
- 8 I provide a more thorough treatment of Kant's relation to scepticism in his Deduction in Shaddock 2015.
- 9 I discuss the Deduction's two-steps-in-one-proof in Shaddock 2014.
- 10 An example is the parallelogram rule for velocity addition in Kant's *Metaphysical Foundations of Natural Science* (4: 492-5).
- 11 I offer a more detailed and thorough treatment of Kant's conceptualism in Shaddock (forthcoming).
- 12 Kant distinguishes real possibility from logical conceivability at Bxxvi n. For more on this topic, see Chignell (2010, 2011, 2014), and Stang (2016). A full treatment of this topic is beyond the scope of this article.
- 13 I would like to thank two anonymous reviewers for *Kantian Review*, audiences at the Southern Study Group of the North American Kant Society, the Eastern Division Meeting of the American Philosophical Association, the University of Illinois at Chicago, and Williams College; special thanks to Karl Ameriks, Melissa Barry, Keith McPartland, Robert Pippin and Will Small; and thanks to my students Amy Levine, Conrad Damstra and Ethan Jacobs, whose work on this project was made possible by the Williams College Class of 1957 Summer Research Program.

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