The Ideality of Space and Time: Trendelenburg versus Kant, Fischer and Bird

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Abstract

Trendelenburg argued that Kant's arguments in support of transcendental idealism ignored the possibility that space and time are both ideal and real. Recently, Graham Bird has claimed that Trendelenburg (unlike his contemporary Kuno Fischer) misrepresented Kant, confusing two senses of 'subjective/objective'. I defend Trendelenburg's 'neglected alternative': the ideas of space and time, as a priori and necessary, are ideal, but this does not exclude their validity in the noumenal realm. This undermines transcendental idealism. Bird's attempt to show that the Analytic considers, but rejects, the alternative fails: an epistemological reading makes Kant accept the alternative, while an ontological reading makes him incoherent. As I demonstrate, Trendelenburg acknowledged the ambiguity of 'subjective/objective', focusing on the transcendental, not the empirical sense. Unlike Fischer, Bird denies Kant's commitment to things-in-themselves in favour of a descriptivist, non-ontological reading of transcendental idealism as an inventory of 'immanent experience'. But neither Bird's descriptivism, nor Fischer's commitment to things-in-themselves, answers Trendelenburg's sceptical worry about transcendental idealism.

Keywords: Graham Bird, Kuno Fischer, Immanuel Kant, space, time, transcendental idealism, F. A. Trendelenburg

1. Kant on Space and Time

In the Transcendental Aesthetic Kant denies that space and time are real existences, or determinations or relations things would have even if not intuited by us, but belong to the form of our intuition, and thus to our subjective constitution (A23/B37–8). This is transcendental idealism.

Concerning space, the first Metaphysical Exposition argues that space is an *a priori* intuition. The first two arguments (in B) prove its apriority: the idea of space is not derived from external experiences, for external experience presupposes the idea of space; and space is a necessary idea: one can think the absence of objects in space, but not of space itself. Since necessity is a mark of apriority, space is *a priori* (B₃8–9). The last two arguments prove that space is an intuition, and not a concept, because it is a singular infinite whole (B₃9–40). Similar considerations apply to time.

The Transcendental Exposition and subsequent parts of the Aesthetic argue that space and time are *only a priori* intuitions, and not (in) things-in-themselves. They are only ideal, subjective forms of our sensibility (B42). Geometry as an apodictic, but synthetic science is possible only if space is intuitive and prior to experience, and thus only in the subject (B41). If space belonged to things-in-themselves, and not only to our cognition, *a priori*, necessary truths about space and external objects would be inexplicable: things-in-themselves would be known by experience, and that never yields *a priori*, necessary knowledge (B42, A48/B65). Elsewhere Kant adduces further considerations,¹ but the focus here is on his argument in the Aesthetic, according to which we can infer from the apriority and necessity of space and time to their transcendental ideality (B44/A28), which excludes their noumenal reality.

This paper will consider and defend Adolf Trendelenburg's famous 'third alternative' or 'neglected alternative' (3A) objection to the ideality thesis against criticisms by his contemporary Kuno Fischer, and more recently by Graham Bird. Section 2 gives a summary of Trendelenburg's position, while sections 3–5 present and discuss Fischer's and Bird's objections. It is argued that Trendelenburg's position is misrepresented, and that neither Fischer's, Bird's nor Kant's arguments absolve the latter of neglecting 3A. Section 6 discusses additional difficulties for Bird's defence of transcendental idealism against Trendelenburg, focusing on the problem of thingsin-themselves. There are numerous other discussions of Kant versus Trendelenburg, e.g. by Henry E. Allison, Jill V. Buroker, Lorne Falkenstein, Sebastian Gardner, Paul Guyer, Desmond Hogan and others.² Given space restrictions, I shall discuss some of these contributions, insofar as they are relevant to my arguments, mostly in the notes.

2. Trendelenburg's Third Alternative and Fischer's Reply

In Logische Untersuchungen³ Trendelenburg accepted that space and time are necessary and *a priori* intuitions, but denied that this entails

that space and time are not real (noumenal). He proposes a third alternative, neglected by Kant:

3A: Space and time are both objective and subjective.⁴

Accordingly, the subjectivity of space and time does not entail exclusive subjectivity, but is compatible with their objectivity. Their apriority and necessity do not therefore entail transcendental idealism. Space and time are *a priori* conditions of external experience, but this need not 'prevent space and time from also being something objective outside of human intuition' (Trendelenburg 1870: 163). 'It has not been proven at all that [space and time] cannot also be objective forms' (164). Space and time are necessary, so cannot stem from experience. But this does not exclude objectivity. Are space and time 'not rather precisely necessary for the mind, because they are necessary for the things?" (ibid.). Trendelenburg echoes Hegel's complaint that, if Kant is right, our cognition concerns mere appearances, and thus approaches illusion. Knowledge should give 'the thing, not us. [According to Kant] we search for things but succeed only in capturing our selves. The modesty of the critical doctrine has been praised, but this is a modesty which reduces science to beggary' (Trendelenburg 1870: 163). Trendelenburg has other arguments against transcendental idealism and for his own theory, but I focus on 3A, the neglected alternative'.⁵

Trendelenburg's criticism was rejected by his contemporary, Kuno Fischer. A debate ensued that soon attracted over fifty contributions from important thinkers, including Cohen, Lotze and Vaihinger.⁶ Fischer denied that Kant ignored 3A: he had adopted it in the pre-Critical phase, and in the Critique he explicitly proved the transcendental ideality of space and time, for if they were real, they could not be pure and originary intuitions, and thus mathematics would be impossible (1865: 175, 181). Kant proved that space is a non-derived mere intuition. Space is objective, but its objectivity depends on our intuition; it can be objective in no other way (Fischer 1865: 178; 1869: p. v). Its intuition-dependent validity is what Kant calls 'empirical reality', while Trendelenburg assigns it 'transcendental reality'. The two notions of reality are distinct (Fischer 1869: p. vi). Essentially, Fischer's reply is based on an argument from ambiguity. So, in his view, Kant did consider the third alternative, in two versions of 3A: he denied that space and time are transcendentally objective and subjective, but accepted that they are empirically objective and transcendentally subjective.

3. Did Kant Consider the Third Alternative?

As we shall see, Trendelenburg had a reply to Fischer. And Vaihinger's authoritative interpretation (1922b) supported him, remaining the dominant assessment for a long time. Recently, however, Graham Bird (2006, 2006a) has defended Fischer's attack on Trendelenburg and endorsement of transcendental idealism.⁷ Bird distinguishes two issues, Kant's position and the argument backing it.⁸ Did Kant simply overlook the third alternative? Or did he consider it, but dismiss it (Bird 2006: 488)? I focus initially on the first question, although it will later connect to the second question.

Bird presents Kant's position as follows. As Trendelenburg says, Kant claims that space and time belong to appearances, not things-in-themselves, which are unknowable. But Trendelenburg errs in assuming 'that the subjectivity of appearances excludes any genuine knowledge of real objects', and that Kant deployed a univocal 'subjective–objective' contrast, as also noted by Fischer (Bird 2006: 490). Kant allowed for genuine knowledge of real objects, but understood as objects of experience, appearances, not things-in-themselves. We know that real objects as appearances are spatio-temporal. We do not know whether things-in-themselves are spatio-temporal, or even exist. Kant considers the possibility that things-in-themselves are spatio-temporal. Bird cites B148–9 for evidence (omitting the text in the square brackets):

Space and time as conditions under which alone objects can possibly be given to us, are valid no further than for objects of the senses and therefore only for experience. Beyond these limits they represent nothing; for they are only in the senses and beyond them have no reality (Wirklichkeit). [The pure concepts of understanding are free from this limitation, and extend to objects of intuition in general, be the intuition like or unlike ours, if only it be sensible and not intellectual. But this extension of concepts beyond our sensible intuition is of no advantage to us. ... They are mere forms of thought, without objective reality.] If we suppose an object of a non-sensible intuition to be given we can indeed represent it through all the predicates implied in the presupposition that it has none of the characteristics proper to sensible intuition; that it is not extended in space or in time ... But there is no proper knowledge if I merely indicate what the intuition of an object is not without being able to say what is contained in the intuition.

Thus, Bird concludes, Kant does consider intelligible the possibility that things-in-themselves have spatio-temporal properties, but nothing

more: given our limited form of intuition, we cannot obtain knowledge about them transcending intuition. We lack the intuition required for noumenal knowledge. Kant has therefore considered the noumenality of space and time, and thus 3A, but rejected it.

I will show in this and the next section that this conclusion is not warranted. Bird, among others, misrepresents Trendelenburg's position; Kant does neglect the third alternative; and B148–9 is a deeply problematic passage for transcendental idealism.

Bird represents Trendelenburg's neglected alternative as 'the possibility of things-in-themselves having spatio-temporal properties' (2006: 491). But this gives us only two options: space and time are ideal (defended by Kant), or noumenal (dismissed by Kant). The third alternative, however, is: space and time are both ideal and noumenal. This is the option considered by Trendelenburg, for he argues that Kant has hardly thought of the possibility that space and time are both (beides zusammen) subjective conditions of experience and objective forms (Trendelenburg 1870: 164), and he refers to it explicitly as the third possibility (e.g. Trendelenburg 1867: 223, 227, 246; Trendelenburg 1869: 1-2). Bird (2006a: 173) does quote Trendelenburg 1867: 227 ('The third possibility is not considered'), but immediately presents Kant as having taken seriously the first two options. But this does not show that Kant considered 3A. Kant considered the possibility that space and time attach to empirical objects, and he considered the possibility that they attach to noumena. But it does not follow that he considered the combination of *both*.

Trendelenburg's understanding of the neglected alternative also involves a subtle complication, missed not only by Bird, but already by Fischer and even Vaihinger. Bird takes Trendelenburg to claim that 'Kant rightly argued that such properties belong to subjective appearances but wrongly took it for granted that this excluded their belonging to things as they really are (in themselves)' (Bird 2006: 489).⁹ This would involve an implausible ontological duplication: the spatio-temporal world would be populated by both noumena and phenomena, with unknowable things standing in spatio-temporal relations to knowable objects. Belonging to the same world as noumena, phenomena could not be characterized anymore as 'mere' appearances, i.e. contrasted to noumena.

Vaihinger's rendition is equally implausible. If 'objective' means 'real', and 'subjective' 'non-real', then 3A is *prima facie* contradictory (Vaihinger 1922b: 136). To rescue Trendelenburg Vaihinger distinguishes between

the (ontological) question of the validity (Geltung) and the (epistemological) question of the origin (Ursprung) of space.¹⁰ Kant's initial question concerns the validity (objective reality) of space, and in this respect subjectivity and objectivity are incompatible: space is either real or non-real, not both. What Trendelenburg, according to Vaihinger, must mean is: space is non-real (ideal) concerning its origin, but real concerning its validity. More precisely: the idea of space (Raumvorstellung) is ideal, because a priori and necessary, but the scope of its validity is real things (Vaihinger 1922b: 137-8). Actually, this is just Trendelenburg's argument in his reply to Fischer: 'the subjective and the objective do not express two mutually exclusive classifications ... rather relations, which can go together, merely the origin (Ursprung) and the hereby conditioned validity (Geltung)' (Trendelenburg 1867: 222; see also 1869: 1-2). Neither Vaihinger nor Bird do Trendelenburg justice: he does not propose the possibility that space and time are both real and non-real (Vaihinger), or real and phenomenal (Bird).¹¹ Rather, he understands the neglected alternative, and claims its possibility, just as in Vaihinger's reading of 3A, namely as

3A*: Space and time are objective, concerning the scope of their validity (real things), and subjective, concerning their origin (their status as ideas).

It is therefore incorrect to describe Trendelenburg's neglected alternative as an *identity thesis*, concerning the identity between objective forms and subjective conditions.¹² Trendelenburg did not claim the identity of the origin of the idea of and the validity of space and time, but their conjunction.

If the third alternative is glossed as 3A*, it is more plausible that Kant has neglected it, for he failed to make a relevant distinction between the origin of an idea and its scope of application, inferring from the apriority and necessity of an idea not only its ideality, but the ideality of what it applies to (space and time).¹³

But even if we ignore this distinction, Kant's reasoning about the properties of ideality and noumenality with respect to space and time is still defective, for he clearly overlooks the possibility of their conjunction. Kant pursues two strategies: he shows that space and time are *a priori* and necessary, from which he infers their non-noumenality, or he assumes their noumenality for the sake of the argument, and shows how this contradicts their apriority and necessity. In both cases he relies

on a tacit premise: that apriority and necessity are incompatible with noumenality, i.e. that space and time cannot be both ideal and noumenal. As Trendelenburg notes, this premise would be acceptable if Kant demonstrated independently that space and time cannot be noumenal (1867: 227-8). Then proving that space is *a priori* and necessary would automatically support its exclusive ideality. But Trendelenburg concludes that this is not how Kant shapes his argument. Kant should:

- (a) prove the apriority and necessity of space,
- (b) disprove the noumenality of space, and
- (c) dismiss 3A as a consequence, whether implicitly or explicitly.

Rather, in B37ff. Kant considers only two options: that space and time are determinations or relations of things-in-themselves (or *wirkliche Wesen*), and that they 'only belong to the form of intuition' (Trendelenburg 1867: 227). 3A does not enter the picture. Kant thus:

- (a) proves the apriority and necessity of space,
- (b) tacitly presupposes the falsehood of 3A,
- (c) dismisses the noumenality of space (Trendelenburg 1867: 228-31).

Pace Bird (2006a: 173), the only way in which Kant considers the first two alternatives is with an exclusivity assumption, i.e. that space and time attach only to empirical objects or only to noumena. But this is to ignore 3A. Witness Trendelenburg against Fischer:

Three positions are possible concerning the doctrine of space and time. Either space and time are only objective, objects of experience, or they are only subjective, merely forms of our mind, or they are subjective and objective at the same time, necessary to our representing (*dem Vorstellen*), real in the things. These three views are mutually exclusive. It would be therefore incongruous to describe the third position as a complement of the exclusionary second, i.e. the exclusion as a complement. Nevertheless, it was done, when [Fischer] ascribed to the *Logical Investigations* the aim to 'both refute and complement Kant's Transcendental Aesthetic'. (Trendelenburg 1867: 223–4)

We must therefore conclude that Kant has indeed ignored, or assumed the falsity of, 3A.

4. The Deeper Problem with B148-9

The B148-9 passage cited by Bird is thus not evidence against Trendelenburg. In fact, it is evidence in his favour. The passage merely recapitulates the conclusion of the Aesthetic, as Kant himself says in the preceding sentence (B148). It explains (in the sentence Bird omits) how that conclusion coheres with the (empty) applicability of pure concepts to objects of an alien intuition, and how that conclusion allows us to think *analytically* about objects of non-sensible intuition, that they are not spatial etc., but not *synthetically*, since we do not possess non-sensible (intellectual) intuition,¹⁴ and hence cannot properly know them. In this final claim Kant presupposes the negation of the third alternative ('the predicates implied in the presupposition, etc.'): inferring analytically that an object not given through sensible intuition is not spatial etc. tacitly excludes the third alternative.¹⁵ How else could Kant know that it is part of the *concept* of a thing-in-itself that none of its predicates have 'the characteristics proper to sensible intuition', if not through the assumption that, if something has such characteristics, then these cannot be the characteristics of a thing in itself?

There is also an unclarity in Bird's interpretation of B148-9, and a fortiori of Trendelenburg's position. Kant is said to believe that 'we can meaningfully characterize supersensible things-in-themselves but that such characterization provides no knowledge', since there is no fact of the matter to decide whether things-in-themselves are spatiotemporal or not (2006: 491). If Kant believes this, there is no head-on clash with Trendelenburg. For it would mean that the apriority of space and time does not exclude their concomitant noumenality. This allows for the *coherence* of the third alternative, which is all Trendelenburg initially claims. But it also entails that transcendental idealism is not (known to be) true. Trendelenburg too thinks that, considering only Kant's arguments, we cannot justify the noumenality of space. But we cannot exclude it either.¹⁶ In allowing things-in-themselves to be spatially thinkable, Kant and Bird would be in agreement with Trendelenburg. Now the unclarity is over whether the claim assigned to Trendelenburg is ontological or epistemological, 'Things-in-themselves may possibly be spatio-temporal', or also 'We may possibly know them to be spatio-temporal'. To reject the latter, it suffices to be a sceptic, but then Kant cannot be construed as inferring the non-noumenality of space and time from their apriority and necessity, but only our ignorance of their (non-)noumenality. This still allows that space and time may be noumenal (as well as ideal, in the sense of 3A*). Trendelenburg goes beyond the possibility claim, but only by invoking additional considerations. Thus Kant would meet him halfway. Both could agree that the apriority and necessity of space and time do not justify knowledge about their noumenality.

But of course, the disagreement runs deeper: the very possibility of the noumenality of space and time is at stake (A375-6 shows that this is Kant's view).¹⁷ However, to reject this ontological possibility, a stronger argument is needed. Here is Bird's: there is reason to deny, 'on balance', the spatio-temporality of things-in-themselves, since spatio-temporality 'in our experience is essentially connected to our sensible intuition while things-in-themselves are subject to a different and unknown intuition' (2006: 491).¹⁸ This won't do: either (a) things-in-themselves are subject to an unknown intuition, and then we don't know whether the intuition is different or not, or (b) they are subject to a different intuition, and then the intuition is not totally unknown. Both claims are problematic, as they depend on ignoring a version of 3A: claiming that the intuition is different (b) ignores the possibility that our intuition of appearances might just be, or at least overlap with, the intuition needed for things-in-themselves; claiming that the intuition is unknown (a) ignores the possibility that the intuition known to us *is* the intuition needed for things-in-themselves. Neither claim has any other justification, 'for in and of itself nothing excludes that the necessary and general, from which the *a priori* origin [of the idea of space and time] is deduced, does not also belong necessarily to the things [themselves]' (Trendelenburg 1867: 228).¹⁹ But are the two claims even coherent?

- (a) How can we know that things-in-themselves are subject to an unknown intuition? Genuine knowledge involves an interplay of intuitions and concepts, hence we would need a respective intuition to know things in themselves are subject to an unknown intuition, which is contradictory. At most, we could claim that we don't know whether they are not subject to an unknown intuition, but this would also allow us to claim that we don't know, taking only the Aesthetic's arguments into account, whether they are not subject to a known intuition, our intuition; which allows for 3A.
- (b) If we are justified to claim that things in themselves are subject to a different intuition, then this intuition cannot be totally unknown, or else we would not be entitled to claim it a different intuition. But if it is not totally unknown, it is, at least partly, known. Knowledge requires intuitions, and knowledge of an intuition does this too.²⁰ Hence, claiming that the intuition required for things in themselves is different is contradictory. At most, we could claim that we don't know whether they are not subject to a different intuition, but this would also allow us to claim that we don't know, taking only the Aesthetic's arguments into account, whether they are not subject to an intuition identical, or at least similar, to *our* intuition; which allows for 3A.²¹

Bird attempts to deflect Trendelenburg's objection by claiming that Kant did consider the supposedly neglected alternative, since he allowed 'meaningful reference to, but no genuine knowledge of, transcendent things' (Bird 2006: 491). This defence fails, as we now see. First, Trendelenburg's alternative concerns not whether space and time are noumenal, but whether they are *both* noumenal *and a prioril* necessary.²² Second, the neglect of the alternative resurfaces time and again, under various guises.²³ Third, where Kant is described as having considered the noumenality of space and time, but rejected it on epistemological grounds, his position becomes compatible with Trendelenburg's (granted Kant's proof that space and time are *a priori* and necessary). Fourth, where Kant is described as having rejected the noumenality of space and time ontologically, his position is incoherent. In conclusion, it is not true that Kant seriously considered Trendelenburg's alternative, despite Bird's appeal to B148–9.

5. 'Subjective-Objective', 'Empirical-Transcendental'

On the 'subjective–objective' and 'empirical–transcendental' contrasts, Bird follows Fischer, and quotes him (Bird 2006: 490). The subjective– objective contrast is not strictly exclusive and univocal. 'Subjective' and 'objective' regarding things-in-themselves are distinct from 'subjective' and 'objective' regarding appearances. Let us call the first, transcendental, contrast 'subjective_t–objective_t' and the second, empirical, contrast 'subjective_e–objective_e'. Objects of experience are only subjective_t, appearances, since 'subjective_t' designates the realm of the empirical. Within this realm we apply the second contrast, dividing the empirical into the inner or mental (subjective_e) and outer or physical (objective_e) (Bird 2006: 492).

Fischer's views are slightly misrepresented here. For Fischer objectivity_e extends beyond the physical: 'regarding the objects of possible experience [space and time] are certainly objective and real. [They] have full reality' (1869: 348).²⁴ Indeed, he applies objectivity_e to space and time, precisely because they are subjective_t (Fischer 1869: p. vi). When Fischer talks about objectivity regarding appearances, he means what Kant calls the 'empirical reality' of space (B44) and time (B53), or also 'objective validity' (B44, 56).²⁵ Fischer's contrast is not between the inner/subjective_e and the outer/objective_e, but between objectivity regarding appearances is subjectivity regarding things-in-themselves; objectivity regarding appearances is subjectivity regarding things-in-themselves. Fischer's point is that excluding the objectivity of space and time regarding things-in-themselves does not exclude their objectivity

regarding appearances, whereas Bird attributes to him a narrower point: excluding the objectivity of space and time regarding thingsin-themselves (objectivity_t) does not exclude their objectivity regarding at least *some* appearances, i.e. those of the outer sense (objectivity_e). We must therefore disambiguate the subjective–objective pair on at least three levels: regarding things-in-themselves, regarding appearances and regarding the inner–outer distinction.

Bird's taxonomy is closer to Fischer's regarding the distinctions transcendental–empirical and reality–ideality. Like Fischer, Bird castigates Trendelenburg for ignoring the empirical–transcendental distinction. Trendelenburg apparently considers only the transcendentally real (objectivity_t) and the transcendentally ideal (subjectivity_t), just the poles of the neglected alternative. For Bird, Trendelenburg forgets that characterizing space and time as transcendentally ideal does not exclude their empirical reality, and since this entails objectivity_e, Trendelenburg fails to see that Kant considers and accepts one version of 3A: space and time are subjective_t and objective_e.²⁶ Kant also considers, and rejects, 'so far as we can tell', the other version of 3A: space and time are subjective_t (Bird 2006: 493).

There is something puzzling about Bird's claim that Trendelenburg missed the ambiguity in the pairs 'subjective–objective' or 'transcendental– empirical'. Take the following argument:

- A: Lloyds is a bank.
- B: Banks are alongside a river.
- C: Lloyds is alongside a river.

This commits the fallacy of equivocation (*quaternio terminorum*), if 'bank' means 'financial institution' in A, but not in B. But if 'bank' means 'financial institution' in both premises, there is no fallacy. If someone objects that 'bank' is ambiguous between 'financial institution' and 'land alongside a river', and introduces corresponding indices, 'bank₁' and 'bank₂', the proponent of the argument can meet the objection by saying: 'By "bank" I meant "bank₁" in both premises. I did not use "bank" equivocally. You have not refuted my argument, only made it less prone to misinterpretation.' The argument is logically impeccable, valid if not sound, as long as 'bank' is used unequivocally.²⁷

So how does Trendelenburg intend his subjective-objective contrast? Is he unaware of its transcendental versus empirical interpretation? The answer is negative. Trendelenburg may not use indices, but he clearly intends the contrast to concern subjective_t-objective_t, i.e. transcendentally. His argument can be displayed like this:

- P1: [Kant proves that] space and time are *a priori* and necessary.
- P2: Whatever is a priori and necessary, is subjective.
- P3: Whatever is subjective may still be objective (3A).
- C: Hence, space and time may still be objective.

Trendelenburg would be surprised to hear that he has committed a fallacy, just because the subjective-objective contrast can be given several senses. P3 surely means not that subjectivity, in the transcendental sense (subjectivity,), does not exclude objectivity in *every* other sense, including the empirical sense (objectivity_e), but that it does not exclude objectivity in the transcendental sense (objectivity,). One indication is that he constantly relates the subjective-objective contrast to things, Dinge (e.g. 1870: 159ff.; 1867: 226-7; 1869: 2ff.),²⁸ not to objects or appearances, just as Kant does more or less consistently throughout the Aesthetic (e.g. B37, 39, 42). In paraphrasing Kant, Trendelenburg is aware of the distinction between things-in-themselves and appearances, and does not confuse the two. Transcendental idealism is presented as the thesis that space is 'the form of all appearances of the external senses [and thus] only a subjective form and no property of things' (1870: 158-9). He makes similar claims about time (159). He also accepts that Kant has explained how pure mathematics is possible, but objects that if space and time are exclusively subjective, applied mathematics is impossible. He considers the response that mathematics applies only to appearances, not things-in-themselves, hence showing awareness of the distinction, but maintains his objection nevertheless (1870: 161-2). He summarizes Kant as showing that space and time are 'a priori forms of intuition and insofar subjective' (1869: 2). The 'insofar' would not make sense if 'subjective' had an empirical sense. alluding to the inner domain of empirical psychology. He mentions the transcendental ideality of appearances Kant intended to prove (e.g. 1867: 232, 238), certainly not confusing it with empirical ideality. The following passage attests to his awareness of the transcendentalempirical contrast:

Those who have made themselves in the slightest familiar with Kant's doctrine will remember that what Kant calls empirical objectivity (application to appearances) is precisely conditioned [or specified] through the exclusive subjectivity of space and time and therefore does not belong [in the present discussion]. *If* the exclusive subjectivity of space and time are proven, Kant's empirical objectivity will ensue, the application [of space and time] to the appearances as conditioned merely through *our* forms of intuition, but not the validity [of space and time] of the things-in-themselves (also called by Kant transcendental reality). (1869: 4-5)

Associate 'transcendental reality' with transcendental realism, 'empirical objectivity' with empirical realism, 'exclusive subjectivity' with transcendental idealism, and reserve 'empirical subjectivity' for empirical idealism, and we have Bird's taxonomy: objectivity_t, objectivity_e, subjectivity_t, subjectivity_e. Clearly Trendelenburg is aware of the distinct senses of 'subjectivity/ideality/idealism' and of 'objectivity/ reality/realism'. He has not failed 'to recognize the dualities in Kant's realism and idealism' (Bird 2006: 493), but does not think such recognition decides the matter. Saying that excluding transcendental reality does not exclude all reality, but includes empirical reality, is not relevant; Bird's objection involves the fallacy of $\mu \epsilon \tau \alpha \beta \alpha \sigma \eta s \epsilon \eta \alpha \lambda \alpha \gamma \epsilon \nu \sigma$, i.e. the confusion of genres or levels, as Vaihinger points out against Fischer on the same matter (Vaihinger 1922b: 291–2).

Trendelenburg recognizes Kant's taxonomy and its implications, but denies that it is *proven* to apply as Kant intended. He does not believe that 'empirical objectivity', i.e. empirical realism, is irrelevant to Kant's transcendental idealism (*pace* Bird 2006: 493), but thinks, correctly, that transcendental idealism, *if* true, establishes empirical realism in Kant's sense. That Kant does not regard the objective–subjective contrast as exclusive does not undermine Trendelenburg (as Bird supposes: 2006: 492), but is accepted by Trendelenburg from the outset, if also put aside. This implication of Kant's taxonomy does not settle the philosophical argument.

In fact, no other aspect of Kant's taxonomy settles the argument, since the taxonomy is just one outcome of his argument for transcendental idealism. Generally, philosophical taxonomies do not provide their own justification. Kant's argument distinguishes (knowledge of) thingsin-themselves from (knowledge of) appearances, transcendental realism from empirical realism. Trendelenburg attacks the rationale of the taxonomy, denying that Kant shows that space and time are transcendentally ideal=empirically objective. If Kant is right, Trendelenburg believes, transcendental idealism collapses into scepticism, undermining empirical, scientific objectivity. Kant insists that transcendental idealism does not turn all sense experience into mere illusion, e.g. in *Prolegomena*, §13, Remark III. Trendelenburg responds: 'But we do not [merely] present what Kant wanted, but also spell out what follows against his will' (1870: 160). So Trendelenburg does not misconstrue Kant's taxonomy (*pace* Bird 2006: 495). What concerns him is the rationale underlying it. The disambiguation strategy only helps secure Trendelenburg's argument against misunderstandings. It does not have logical or philosophical substance, and does not refute Trendelenburg's defence of 3A.

6. The Defence of Transcendental Idealism

Bird, like Fischer, believes that Trendelenburg is wrong to reject, and Kant right to accept, transcendental idealism, as based on the latter's views about the ideality of space and time.²⁹ He argues that Trendelenburg assimilates transcendental idealism to traditional, empirical idealism. Trendelenburg, as viewed by Bird, attributes to Kant two conclusions (Bird 2006: 494):

- C1: Space and time do not belong to real (independent) things as they are in themselves. They are 'subjective', not 'objective'.
- C2: Objective knowledge of real independent things (in themselves) is unattainable.

C1 stems from Kant's supposedly neglecting 3A. Trendelenburg rejects C2 as turning what we call 'knowledge' into mere illusions. Bird's reply is that CI does not exclude the compatibility of some forms of subjectivity, namely, Subjectivity, (regarding things-in-themselves), with some forms of objectivity, namely, Objectivity, (regarding appearances).³⁰ This simply repeats the problematic charge of equivocation. Trendelenburg is also charged with linking transcendental idealism to empirical idealism by 'opposing subjectivity, to objectivity,' - an illicit 'cross-classification' within Kant's taxonomy (Bird 2006: 494). But this presupposes that Kant's taxonomy is correct, precisely what Trendelenburg questions. Even if this taxonomy were acceptable independently of Kant's idealism, it would be still incorrect to say that Trendelenburg opposes subjectivity_e to objectivity_t, namely, the subjectivity of mental states to the objectivity of things-in-themselves. He agrees explicitly with Kant on the subjectivity of space and time, more precisely on the necessity, generality, intuitivity and apriority of the ideas of space and time (Trendelenburg 1870: 157ff.; 1867: 216; 1869: 1, 9). This is subjectivity, transcendental subjectivity, not subjectivity, psychological subjectivity. He does not agree with Kant that space and time are valid only for appearances, not things-in-themselves. Indeed he denies that space and time are valid for appearances at all, because objects of experience are not appearances in Kant's sense.³¹ Trendelenburg is a transcendental realist. In 3A he opposes subjectivity, i.e. *exclusive* subjectivity, to objectivity. He questions the exclusive subjectivity, of space and time not because it is the subjectivity of inner states (subjectivity_e), which it is not, but because it severs us from things-in-themselves, from objectivity, making appearance illusion (1870: 159-60; 1867: 217, 225), and transcendental idealism scepticism, leaving us with no knowledge at all. He calls this scepticism 'idealism', but, pace Bird (2006: 495), he does not associate it with a form of idealism which affirms that only inner mental states or ideas, i.e. contingents, truly exist.³² For he grants Kant that the ideas of space and time are pure and necessary forms of intuition. But granting Kant also the exclusivity claim would denude them of real content.

Trendelenburg's evidence for the worry that Erscheinung approaches Schein is the notorious remark II in Prolegomena: just as 'the sensation of red has no similarity to the property of cinnabar which causes this sensation in me, so does it not make sense to say my idea of space is similar to the object'. The subjectivity of the primary quality of space is analogous to the subjectivity of the secondary quality of colour. (It seems that Trendelenburg accepts the subjectivity of colour.) So if space's subjectivity is analogous to colour's subjectivity, then just as cinnabar appears red, but is not really, so objects appear spatial, but are not really. Just as our ordinary judgements about colours ('Cinnabar is red') are systematically mistaken, so are our ordinary spatial ascriptions. In Kant's view there is something deeply wrong with our experience, as ordinarily understood (pace Bird 2006: 495). We take spatial properties to belong to independent objects, but they are only properties of our mode of apprehending objects.³³ It is no use arguing that by 'object' Kant means 'appearance', and appearances have their own 'objectivity' (objectivitye), as this would imply that appearances only appear to be spatial. As Trendelenburg notes, space and time are more general and fundamental than colours: if objects are not spatiotemporal, there is no objectual grounding for our knowledge whatsoever, 'and we cannot rid ourselves of the worry that illusion has a hand in appearance' (Trendelenburg 1870: 161).

To dispel this worry we need more than a distinction between various glosses of the subjective-objective contrast. We need to see how

transcendental idealism exorcizes the ghost of traditional scepticism, while avoiding dogmatic metaphysics. Why are appearances not mere illusions? Why could our entire stream of 'immanent experience' not be a mere dream, within which we, Kantians, call all episodes 'subjective,' and divide them into 'inner', subjective, and 'outer', objective, episodes? Does transcendental idealism amount to empirical idealism, only renaming empirical idealism's ideas 'appearances' or empirical 'objects', a sub-domain of which, 'external' appearances, is called 'empirical reality', with 'matter' 'in' it, while the other sub-domain is called immediate self-consciousness, 'the idea of myself, as the thinking subject' (A371)? The answer must be: transcendental idealism falls short of empirical (enthusiastic) idealism, because it is committed to thingsin-themselves, unknowable, but necessary both for tracing the limitation designated by 'transcendental' and ensuring that the 'realism' of 'empirical realism' is not a mere *facon de parler*. As Vaihinger writes: 'Things-in-themselves stand firmly like a wall of palisades behind appearances, prevent their dissolution into illusion and forbid the association of Kant with Berkeley' (Vaihinger 1922b: 505). Kant admits this commitment in many passages in and outside of the Critique, e.g. in A536-7/B564-5, where he argues that appearances, not being thingsin-themselves, must nevertheless have intelligible grounds which are not appearances, or in the Prolegomena, where he explains that his idealism does not deny the existence of things or bodies outside us, but only claims that 'all the properties which constitute the intuition of a body belong merely to *its* appearance' (Ak. 4: 289; my emphasis),³⁴ or in his reply to Eberhard, where he stresses that Eberhard's claim that space and time have not only subjective, but also objective grounds which are the thingsin-themselves is 'literally and repeatedly asserted in the Critique' (Ak. 8: 209). Fischer actually acknowledges this ontological commitment:³⁵

[Kant] has always asserted the (transcendental) reality of things-in-themselves, denied their cognoscibility, proved their non-cognoscibility ... Their affirmation ... is actually required by that doctrine. ... The thing-in-itself does not belong to the appearance, but does characterize it, because through the affirmation of such an unconditioned foundation (*Urgrund*) appearances can be distinguished from illusion, a reality without which appearances would be merely a dream, if a coherent one. (Fischer 1909: 649)

It is debatable whether invoking things-in-themselves saves Kant's empirical realism, since this move, as Trendelenburg points out, oversteps the bounds Kant set to metaphysical cognition: 'Kant avoids illusion by relating appearances to causally active things affecting our senses. But he is actually not entitled to speak of *causally active* things. Experience cannot be understood as an effect in his doctrine' (Trendelenburg 1870: 160).³⁶ Even more debatable, however, is to avoid reference to things-in-themselves altogether, to declare them 'an illusory consequence of our concepts', as Bird does (2006a: 758), or *Schein*, as Cohen did (see Vaihinger 1922b: 503).

In accepting the real existence of the thing-in-itself, Fischer realizes that transcendental idealism, and thus the ideality of space and time, require justification regarding things-in-themselves. Bird, however, believes that Kant's idealism entails an empirical realism needing no justification. and that Trendelenburg's worries about experience becoming illusion (Schein) stem from misunderstanding Kant's project (Bird 2006: 495, 498).³⁷ Bird cites the Fourth Paralogism (A), where Kant argues that empirical realism needs no justification. But this passage manifests Kant's difficulty in distinguishing empirical from transcendental idealism. Kant's target is here Descartes, not Berkeley. Transcendental idealism is said to imply that all appearances, including external ones, are mere ideas (Vorstellungen), not things-in-themselves, and space and time are mere forms of sensory intuition. Transcendental realism implies that appearances are things-in-themselves, independent of our sensibility, which slithers into 'empirical idealism', since the resulting gap between ideas and objects excludes certainty about the reality of our representations (A369). For Kant transcendental idealism has no such problem: even the (possibility of) existence of matter is a mere idea, and since I am immediately conscious of all my ideas, I am immediately conscious of external objects ('bodies'), as a subclass of my ideas. This is 'empirical realism': the reality of matter is not inferred, but immediately perceived, 'without going outside our mere self-consciousness' (A370-1).

However, this is deeply problematic: Kant avoids Cartesian empirical idealism by turning physical bodies into ideas, of whose existence we are supposedly directly and apodictically aware: 'all objects with which we can occupy ourselves, are one and all in me, that is, are determinations of my identical self' (A129). This doctrine has lost none of its implausibility. A table is made of wood and has four legs. Is a *Vorstellung* also wooden and four-legged? As Frege argued, 'Not everything that can be object of my understanding is an idea' (Frege 1956: 307).³⁸ If it were true that we are immediately aware of physical bodies in the way we are immediately aware of our ideas, this empirical 'realism' would be

'beyond doubt' (A375). But this 'realism' would also be rather similar to Berkeleyan idealism, except that 'matter' were not 'a manifest contradiction' (Berkeley 1950: IV), but 'the substance of phenomena', which is itself mere appearance and thus part of the sphere of my consciousness (A266/B322, A277/B333, B370).³⁹ Kant has the problem noted by Kemp Smith (1930: 304): either bodies are ideas, and then we cannot claim that something real corresponds to our ideas of bodies (*pace* A377), or bodies are distinct from their ideas, and then they are not ideas after all and we have no immediate knowledge of them.⁴⁰ *Either* it is unclear what is realist about (empirical) realism, and indeed what an idea, a representation, might be. *Or* Kant's idealism is undermined, and his empirical realism precarious.

Given these difficulties it helps little to describe Kant's project as descriptive, non-normative idealism (Bird 2006: 497). For this interpretation, Bird cites the Prefaces and also the Amphiboly. In Preface A Kant describes his aim: 'For it is nothing but the *inventory* of all our possessions through *pure* reason, systematically arranged' (Axx). But the context shows that he means not the system of the *Critique (pace* Bird 2006a: 28–9), but the yet to be delivered system of metaphysics, of which the *Metaphysical Foundations of Natural Science* were to become but a part ('one such system'; Axxi).⁴¹ Moreover, the descriptive metaphor does not accord with the method of the *Critique*, which involves direct and indirect proofs, refutations, deductions, etc.

For Bird the Amphiboly (especially A269-70/B325-6) presents a 'transcendental topic which aims to allocate the central concepts of our experience to their rightful places', taking 'our experience, ordinary and scientific, as a *datum*' (Bird 2006: 497). But the transcendental topic has, according to Kant, a more modest task, that of the rightful location of ideas only regarding their comparison and distinction (A26off./ B316ff.), which precedes the categories and the formation of objective judgement.42 The topic 'contains no more than the four headings' of the concepts of reflection (identity-difference, agreement-opposition, inner-outer, matter-form). The transcendental topic is not congruent with the Critical project, or even just the Doctrine of Elements. Moreover, as Kemp Smith showed (1930: 410-12), the Amphiboly involves the same difficulty as the rest of the Critical project, insofar as the understanding, in limiting sensibility, 'thinks for itself a thing-initself', as the cause of appearances, while at the same time no categories are permitted to apply to it (A288/B344).⁴³ Calling this a descriptive project does not solve the difficulty.44

And what sceptic will be silenced by the assertion that experience is not offered a justification, but taken as a *datum*, whose structure is merely described, if the grounds for the sceptical doubt arise from within this description?⁴⁵ It may well be that the Aesthetic 'does not even *attempt* a philosophical justification of the external world' (Bird 2006: 498), but then again 'we do not [merely] present what Kant wanted, but also spell out what follows against his will' (Trendelenburg 1870: 160).

Notes

- 1 See B71-2, A497-507/B525-35, Ak. 4: 282, 4: 286.
- See Allison (1976; 1983: 111–14; 2004: 128–32; 2010), Falkenstein (1995, 2010), Gardner (1999: 70–3), Guyer (1987: 362–9), Herissone-Kelly (2007), Hogan (2009), Kitcher (2001), Melnick (2001), Van Cleve (1999: 34–7).
- 3 1840, 1862, 1870. I refer to the 3rd edn. Translations from German are mine.
- 4 According to Vaihinger (1922b: 302–10), Kant may have considered some version of 3A explicitly in *Concerning the Ultimate Ground of the Differentiation of Directions in Space* (1768), *Prolegomena* (§§8–9, §13), A129, B166–7 (regarding the categories, not space and time), letter to Herz 21 Feb. 1772 (Kant 1972: 611), Loses Blatt 22 March 1780 (Reicke 1889: 150ff.).
- 5 Other arguments by Trendelenburg against Kant can be found in Trendelenburg (1870: 161–7) and Trendelenburg (1867: 233–40). Trendelenburg's positive account of space and time centres on motion as the fundamental concept (Trendelenburg 1870: ch. 5), from which space and time derive. Since motion occurs in both thinking and being, it overarches the subjective–objective gap and harmonizes both spheres (1870: 168). So Trendelenburg does not simply postulate 'a bare coincidence' (Gardner 1999: 73) or 'a broadly-Leibnizian agreement' (Hogan 2009: 381). For objections to this speculative view see Fischer (1865: 176–8, 180–1).
- 6 For a detailed overview see Vaihinger (1922b: 134–51, 290–326), for a briefer one Köhnke (1986). The 'neglected alternative' objection, or versions thereof, was initially raised by Kant's contemporaries, e.g. by H. A. Pistorius (see Vaihinger 1922b: 143–6).
- 7 Bird claims that most commentators sided with Trendelenburg, but as Vaihinger's bibliography demonstrates (Vaihinger 1922b: 546–8), the camps were almost equal in number, with a few neutral mediators.
- 8 Cf. Fischer 1870: 48.
- 9 For a similar misunderstanding see Caird (1889: 307). See Kemp Smith (1930: 114) for criticism of Caird.
- 10 Vaihinger discusses only space in this passage, but similar considerations apply to time. He criticizes Kant for the same confusion in Vaihinger (1922b: 141).
- 11 See also Hogan (2009: 356–7) for a similar mistake.
- 12 This oversight is committed by thinkers with diverging opinions about the neglected alternative thesis. Gardner (1999: 71) is one such example. Further examples are found in the exchange between Buroker (1981) and Allison (1983). Buroker (1981: 95-6) criticizes Allison (1976) for presenting the neglected alternative thesis as a claim about the *numerical* identity between space as a form of human sensibility and as pertaining to things-in-themselves. Buroker agrees with Allison that this claim is a manifest contradiction, but denies that this is the neglected alternative. The neglected alternative claims instead that the space of our experience might be *qualitatively* identical with the space of things-in-themselves. This presupposes that there are

(at least) two spaces out there. Buroker ascribes this view generically to 'Kant's critics', but this view is certainly not Trendelenburg's, even though it might be that of various Leibnizians (Buroker 1981: 96–7). This view is actually not plausible, since the distinction between qualitative and numerical identity is arguably only applicable to spatio-temporal objects (see Wittgenstein 2009: §253), not to space (or time). Indeed, if it makes sense for two spaces to exist, why not for three, four, or infinitely many? But space is not thus countable. Space has no principle of individuation, but is, or contributes to, the principle of individuation of material objects. Allison (1983: 112–13) objects to Buroker that it is meaningless to speak of a qualitative identity between properties of objects of experience and noumenal things, and infers from this the non-spatiality of things-in-themselves. Whether or not this is warranted (see n. 18 below), it is clear that this objection can only target Trendelenburg on the assumption that his view involves an identity thesis. But this is not the case.

- An objection to this, not made by Bird, might refer to the discussion of geometry in 13 the Transcendental Exposition, §3 (B40-1). Here Kant appears to rely on a distinction between pure and applied geometry (according to Vaihinger 1922b: 268ff.). While pure geometry offers synthetic a priori knowledge of space prior to any object of experience, applied geometry offers such knowledge about every object of experience, because space, as a form of sensibility, makes the experience of objects possible (see also A87-8/B120, A90, A93). We have here, the objection runs, just the above distinction between the origin of space (pure geometry) and its validity (applied geometry), but this does not mean that we cannot infer to the ideality of spatial objects, for their (formal) spatial properties are known in advance of their experience. This objection suffers from two weaknesses: it assumes (as Kant does), that (Euclidean) geometry is transcendental just like the intuition of space and thus a condition of experience, and it still does not refute 3A*, but only interposes the additional layer of phenomena between the things-in-themselves and the ideas of space and time. For the first problem see Helmholtz (1876: 21ff.), Helmholtz (1879: 22ff., 51ff.), for the second Vaihinger (1922b: 272).
- 14 On intellectual intuition see also B307-9.
- 15 Since Kant only infers that an object of *non-sensible* intuition is not spatial etc., the passage allows the possibility that objects of sensible, but non-human intuition are spatial, perhaps contradicting A26.
- 16 See his formulations ('nothing prevents', 'Kant has not excluded', etc.) in Trendelenburg (1870: 163–4), Trendelenburg (1867: 223ff.), Trendelenburg (1869: 1ff.). See also Trendelenburg's recapitulation of his initial claim: '[The Logical Investigations] claimed that Kant did not consider this third possibility and therefore left a gap in the foundation of his proof, a gap which possibly contains the truth' (Trendelenburg 1869: 9).
- 17 A number of recent commentators take this to be Kant's view. See e.g. Guyer (1987: 362), Gardner (1999: 70), Hogan (2009: 373). For a dissenting voice, see Kitcher, who claims that Kant's appeal to noumena is only meant to serve 'as a Critical reminder that we can make no inferences from the necessary conditions for cognition to the way the world is' (2001: 608). But which world? If the phenomenal world, then Kant disagrees, because he claims that the task of metaphysics is precisely to obtain synthetic *a priori* knowledge about the world (B18). Kitcher can't have a noumenal gloss of 'world' on her own reading.
- 18 The spatiality (and temporality) of things-in-themselves has been denied in various other ways in recent literature, e.g. by Allison (1976, 1983, 2004, 2010) and Hogan (2009). Allison argues that a reference to the human mind and *its* peculiar capacities

is built into the Kantian notion of a form of sensibility and that it 'follows from this that if space is such a form, then neither it nor any properties thereof can be meaningfully predicated of objects, when these objects are considered in abstraction from their representation by a mind endowed with that manner of representing' (Allison 1983: 113). It is therefore meaningless to claim an identity between properties of objects as they are represented only by us and properties of things as they are independent of being thus represented (ibid.). Note, however, that Trendelenburg's position does not amount to an identity thesis (see n. 12 above). In addition, it is unclear how one can argue that space is a form of representation peculiar only to us (see also Allison 2010: 115-16). To know this, we would have to have access to nonhuman forms of cognition and to things-in-themselves. But Allison does not allow for such an access. The ontological conclusion that things-in-themselves are non-spatial is problematic anyway, given that it is based on apparently mere epistemological and semantic considerations (Allison 1983: 114). Allison might deny that he is reaching ontological conclusions, as he has a 'deflationary' view of things-in-themselves (see especially his later work, e.g. Allison 2004: 132; 2010: 112, 115-16, 122-3), but it is difficult to see why the denial of the 'theocentric point of view' (2010: 114) deprives transcendental idealism of ontological implications. Does this denial not involve a negative existential claim, and a corresponding positive one? If all there is is determined by the human point of view, then propositions like the following are pure (and vacuous) ontology: 'we can know a priori that objects necessarily conform to the conditions under which we alone can cognize them' (Allison 2010: 115; for the charge of vacuousness see also Herissone-Kelly 2007: 274). In any case, how can epistemological premises really justify ontological conclusions, if these epistemological premises involve considerations about the limitations of human sensibility which are essentially privations? On the other hand, if we grant such conclusions, they must be intelligible. But if 'Things-in-themselves are not spatial' is meaningful, why not also 'Things-in-themselves are spatial'? By contrast, if 'Things-in-themselves are spatial' is meaningless, why not also its denial (see also Herissone-Kelly 2007: 272)? More generally, how can the denial of a meaningless statement establish an ontological claim? In fact, pace Allison, neither proposition is meaningless, given Kant's distinction between thinking and knowing (Bxxxvi, A155/B194, A239/B298; see also Buroker 1981: 98–9). A concept of an object which is intuited in a way differing from our sensibility is not contradictory, even if we can't have a concept of such an intuition (A254/B310). For discussion of Allison's position on the non-spatiotemporality of things-in-themselves see Guyer (1987: 336ff.) and Falkenstein (1995: 289-309); for a reply to the former see Allison (1996: 9ff.) and a reply to the latter Allison (2004: 130-2). For more discussion of Allison on the neglected alternative see Herissone-Kelly (2007: 272-7), Kitcher (2001: 600-2, 606-7).

Hogan's recent defence of the non-spatiality of things-in-themselves (understood by him in a non-deflationary sense) is based on the claim that Kant is committed to the premise that things-in-themselves are 'b-unknowable', i.e. that they lack a determining ground through which they could be known. Together with the premise 'If space and time are objective determinations of things in themselves, no features of any things in themselves have the property of b-unknowability', this gives us, by modus tollens, the conclusion 'Space and time are not objective determinations of things in themselves' (Hogan 2009: 370). This argument is supposed to save Kant from Trendelenburg's objection and from the incoherence of both denying us knowledge of things-in-themselves (A30/B45) and claiming that they are certainly non-spatio-temporal (A48/B66). It all turns on the first premise, for which Hogan can't produce evidence from within the Critique, which is the main text under discussion and was so for Trendelenburg. Still, Hogan provides external evidence for Kant's support of the b-unknowability thesis, evidence found in texts concerned with the metaphysics of *freedom* (Hogan 2009: 370-2). In one such passage Kant writes that the 'reality of freedom inevitably brings with it the doctrine of the ideality of things as objects of intuition in space and time', for else 'the things in themselves, actions would depend completely on the mechanism of nature, and freedom together with its consequence morality would be destroyed' (Ak. 17: R6343; cf. Hogan 2009: 372-3). But this is to turn Kant's argument upside down. At best, we have an interdependence, for in Ak. 17: R6353 Kant claims that 'the ideality of space and time and the reality of the concept of freedom' are the two cardinal points of the Critique, 'from which each leads analytically and inevitably to the other' (cf. also Hogan 2009: 382, where the passage is slightly mistranslated). In fact, to claim that things-inthemselves have no determinate ground is to have already drawn the phenomenalnoumenal distinction argued for by the Aesthetic. And what kind of knowledge claim establishes b-unknowability? If a synthetic one, on what intuition is it based? If an analytic one, it should be obvious, but it is not. Given its tremendous importance, and the threat of the antinomies, transcendental freedom provides the rationale for developing transcendental idealism. But it is not the latter's premise, as it is not a knowable truth, rather a necessary presupposition (Allison 2010: 122). This order of explanation is visible from a passage cited by Hogan himself: 'it will be interesting not to make the conditions of our possible knowledge of things into conditions of things [in themselves]: for if we do this then freedom is destroyed' (Ak. 17: R6317; cf. Hogan 2009: 372). See also Kreimendahl (1990: 197ff.).

- 19 These considerations only apply to things-in-themselves which are or might be spatiotemporal. Not all things-in-themselves need be so, especially not God or the world as a totality. Kantian humility might be maintained by distinguishing between knowable spatio-temporal things-in-themselves as objects of experience, and unknowable nonspatio-temporal things-in-themselves, like God and the world. But cf. B71-2 and Hogan (2009: 373) for discussion.
- 20 If it did not, it would be mere analytic cognition, cognition based on what is contained in a concept.
- 21 We can compare these considerations with the following. If I know that a language is unknown to me/different from my own, it must be sufficiently known/similar for me to know that it is an unknown/different *language*.
- 22 Bird's debate with Guyer (Guyer 1987: 363; Bird 2006: 7) is therefore not relevant. The issue is not whether Kant considered ('seriously') the possibility that thingsin-themselves are spatio-temporal. This is not Trendelenburg's third alternative.
- 23 See Gardner 1999: 72 for a related point.
- 24 This is from the passage in Fischer which Bird quotes in 2006: 7–8, in his translation. I follow my own, more literal translation.
- 25 Fischer's 'objective regarding appearances' and Bird's 'subjective,' seem to cross paths in B53: '[Time has] subjective reality in respect of inner experience; that is, I really have the representation of time and of my determinations in it. Time is therefore to be regarded as real, not indeed as object but as the mode of representation of myself as object.' Fischer's 'objective' is here 'real' and Bird's 'subjective,' just 'subjective'.
- 26 Here Bird's taxonomy clearly makes the empirically real coincide with the physical, whereas Kant allows for the mental to belong to the empirical realm.
- 27 Vaihinger (1922b: 138–40) levels another charge of equivocation against Trendelenburg. Concerning its validity space may be real (1) or ideal (2), and concerning its origin it may

be empirical (3) or *a priori* (4). This gives four options: I-3 (Locke), 2-3 (Berkeley), I-4 (Trendelenburg), 2-4 (Kant). But this does no more than locate Trendelenburg's position within a wider range of possibilities.

- 28 Trendelenburg generally uses 'objects' synonymously with 'things-in-themselves' (e.g. 1870: 158). Fischer (1869: p. vi) acknowledges this.
- 29 Note that there are other ways to defend transcendental idealism, such as offered in Langton (1998: ch. 10), who argues that Kant's argument that we can't have knowledge of things-in-themselves because of the receptivity of human knowledge is independent of his theory of space and time. This interpretation requires separate discussion.
- 30 Remember, and ignore, that in Bird's taxonomy objectivity_e only covers the *outer* empirical realm, not the inner.
- 31 Hence it is not true that 'Trendelenburg's alternative does not ... contradict transcendental idealism, understood as a thesis exclusively about the objects of our cognition' (Gardner 1999: 70). That is precisely what it contradicts.
- 32 Bird characterizes traditional idealism as 'a restriction of the content of our beliefs to inner mental representations' (2006: 495). Kant's characterization is: 'the doubting of [the existence of things] constitutes idealism in the received sense' (Ak. 4: 293).
- 33 '[The outer representations] have, indeed, this deceptive property that, representing objects in space, they detach themselves as it were from the soul and appear to hover outside it. Yet the very space in which they are intuited is nothing but a representation, and no counterpart of the same quality is to be found outside the soul' (A385).
- 34 Elsewhere (2006a: 207–19), Bird subjects Prolegomena §13 (Ak. 4: 285–94) to detailed discussion, arguing that Kant is not expressing commitment to the existence of things-in-themselves, but to (outer) appearances. This reading is problematic. See Kemp Smith (1930: 306), Walker (1978: 134) and my forthcoming discussion for dissenting readings.
- 35 For discussion of this commitment see Guyer (1987: part V), Ameriks (1992a, 1992b), Westphal (2004: ch. 2), Falkenstein (2010: 152). Incidentally, Fischer's ontological gloss on the conclusion of the Aesthetic does not simply concern 'immanent experience' (Bird) for, as he explains, space and time are entirely imaginary and are nothing that things-in-themselves are or could have; that they have full reality regarding empirical cognition does not affect the ontological question (see Fischer 1869: 347–8). Also incidentally, Fischer's and Bird's talk about two kinds of reality (2006: 492) is problematic. If there were two kinds of reality, they would be so regarding something that makes them two, rather than one, and this something would be either some thing, and thus have its own, one, all-encompassing reality, or it would be itself the one, all-encompassing reality.
- 36 Fischer discusses these difficulties in Fischer (1909: 650ff.).
- 37 Trendelenburg was not the first to raise this worry. Precursors include Garve, Mendelssohn, Pistorius. See Vaihinger 1922b: 495.
- 38 Cf. also Frege's polemic against the Kantian Benno Erdmann in Frege (1964: 17–25). Kant stands in a psychologistic tradition whose demolition was initiated by Frege (or even Bolzano).
- 39 This contradicts Kant's later letter to Beck (4 Dec. 1792), in which he qualifies his idealism as concerning merely the form of representation, not 'matter, i.e. the object and its existence' (Kant 1972: 611). On the other hand, this claim accords with his view in *Prolegomena* §13, as discussed above. See also Vaihinger (1922b: 500-1).
- 40 Or are we to suppose that Kant holds a causal theory of perception *within* the realm of appearances (subjective_t), i.e. that the perceptual, inner idea of an apple is caused

by the external idea of an apple, both ideas existing within my sphere of selfconsciousness? What evidence is there for such a view?

- 41 See also Vaihinger (1922a: 147, n. 1).
- 42 See also Natterer (2003: 371).
- 43 See also Ak. 4: 314, 354-5.
- 44 Bird cites the Prefaces and the Aesthetic for textual proof. In B43-4 and B52 Kant does not say that his Exposition proves or establishes the empirical reality of space, but only that it teaches (*lehrt*) and asserts (*behaupten*) it. This is not decisive evidence. *Lehren* is vague Kant uses it also with reference to empirical perception and precisely in contrast to the *a priori* grounds of the necessary (A31). An assertion is surely something in need of justification, especially an assertion about objective reality (B698). In A378-9 he says that in the Aesthetic the ideality of appearances was *dargetan*, which can mean either 'demonstrated' or 'presented'. More decisively, A357 says that he has '*proven* in the Transcendental Aesthetic, beyond all question, that bodies are appearances of outer sense and not things-in-themselves' (my italics), which is just a corollary of the empirical reality of space and time. Incidentally, Bird's descriptivist reading of the Aesthetic seems to have precursors (see Vaihinger 1922b: 466).
- 45 Together with the Janus-faced character of transcendental idealism itself: 'The sensuous world is nothing but a chain of appearances connected according to universal laws; it has therefore no subsistence by itself; it is not the thing-in-itself, and consequently must point to that which contains the basis of this experience, to beings which cannot be known merely as phenomena, but as things-in-themselves. In the cognition of them alone reason can hope to satisfy its desire of completeness in proceeding from the conditioned to its conditions' (Ak. 4: 354).

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