

12-2008

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Publication Info

Published in *Archiv für Geschichte der Philosophie*, ed. Christoph Horn, Camilla Serck-Hanssen, Christia Mercer, Volume 90, Issue 3, 2008, pages 323-345.

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ZUR DISKUSSION

‘An Almost Single Inference’ – Kant’s Deduction of the Categories Reconsidered

by Konstantin Pollok (Columbia, SC)

Abstract: By taking into account some texts published between the first and the second edition of the *Critique of Pure Reason* that have been neglected by most of those who have dealt with the deduction of the categories, I argue that the core of the deduction is to be identified as the ‘almost single inference from the precisely determined definition of a judgment in general’, which Kant adumbrates in the *Metaphysical Foundations* in order to ‘make up for the deficiency’ of the A-deduction. Whereas the first step of the B-deduction is an attempt to show that the manifold of an intuition belongs to the ‘necessary unity of self-consciousness’ by means of the synthesis of the understanding, the second step has the task of showing that the very same synthesis is responsible for the spatio-temporal unity of the manifold. Thus, Kant’s ‘answer to Hume’ is that no spatio-temporal objects of experience at all are merely ‘given’, independently of the conceptual activities of the understanding. Against the established view I substantiate the claim that with this ‘almost single inference’ of the second proof step the distinction between judgments of perception and judgments of experience consequently vanished from Kant’s thinking.

There has been a long-standing dispute on the structure of Kant’s deduction of the categories in the second edition of the *Critique of Pure Reason*, at least for the last 40 years. Even to give a survey of the different interpretative accounts is difficult, let alone to discuss them in detail within the length of a paper. But there is one author in particular who is outstanding not only for having re-opened that discussion but also for reinforcing its momentum with another, quite different paper on the same subject: in 1969, Dieter Henrich published a paper on “The Proof-Structure of Kant’s Transcendental Deduction”, and twenty years later he followed this with his paper on “Kant’s Notion of a Deduction and the Methodological Background of the First *Critique*”. In the latter Henrich investigates the overall task of what Kant might have had in mind by the term ‘deduction’. By referring to juridical procedures of the time with the production of legal ‘deduction writings’ Henrich points to a methodological connection between the deduction of the first *Critique* and Kant’s lectures on logic, where Kant distinguishes the concept of reflection from

the concept of investigation.¹ The transcendental deduction of the categories, on this account, is an investigation by which Kant makes explicit the transcendental presuppositions structuring our reflections.

In what follows I shall build on what I take to be the main insight of Henrich's first paper. I shall also take into account some revealing philosophical details from texts published between the first and the second edition of the *Critique* that have been neglected not only by Henrich, but by most of those who have dealt with the deduction of the categories. I think one has to reconsider the deduction of the categories in the second edition in the light of Kant's *Prolegomena to Any Future Metaphysics* from 1783, Johann Schultz's review of J. A. H. Ulrich's *Institutiones logicae* from 1785, and, finally, Kant's explicit announcement of a response to that review in a long footnote to the Preface to the *Metaphysical Foundations of Natural Science* from 1786. I shall (I) lay out Schultz's criticism of Kant's distinction between judgments of perception and judgments of experience in the *Prolegomena*. Drawing on Henrich's arguments from his 1969 paper I shall then (II) explain what I take to be the "almost [...] single inference from the precisely determined definition of a *judgment* in general", which Kant adumbrates in the *Metaphysical Foundations* in order to "make up for the deficiency"² of the A-deduction. In connection with the problem of whether a transcendental deduction of the categories is unavoidably necessary or Kant's *Critique* stands firm, even without a complete deduction,³ I shall finally (III) conclude with some remarks on whether or not the second part of the B-deduction amounts to a real change of Kant's theory or concerns only the manner of presentation, as Kant literally saw it.

I

In giving an account of the status of the transcendental deduction, Kant calls attention to Hume's "*crux metaphysicorum*" (IV, 312), the concept of causality, in an immediate response to a hostile and superficial review

¹ For this distinction between *Überlegen* (*reflexio*) and *Untersuchen* (*examinatio*) see Kant 1992, 127 (*Logik Blomberg*, XXIV, 161), as well as *Logik Busolt* (XXIV, 641), *Logik Philippi* (XXIV, 424), and *Logik Pölitz* (XXIV, 547); quotations from Kant follow the translations listed among the references, and cite the pagination of the standard Academy Edition (Berlin 1900–), except for the *Critique of Pure Reason* (*CPR*), where I use the common A/B form to refer to pages of the first (1781) and second (1787) editions. On the problems raised by Henrich's second paper see Pollok (forthcoming).

² Kant IV, 475–76n.

³ See *CPR* A 88/B 121, and IV, 475n.

of the *Critique of Pure Reason*, written by Ch. Garve and slightly revised and published by J. G. H. Feder.⁴ Thus Kant writes in the Preface to the *Prolegomena*:

So I tried first whether *Hume's* objection might not be presented in a general manner, and I soon found that the concept of the connection of cause and effect is far from being the only concept through which the understanding thinks connections of things *a priori*; rather, metaphysics consists wholly of such concepts. I sought to ascertain their number, and as I had successfully attained this in the way I wished, namely from a single principle, I proceeded to the deduction of these concepts, from which I henceforth became assured that they were not, as *Hume* had feared, derived from experience, but had arisen from the pure understanding. This deduction [...] was the most difficult thing that could ever be undertaken on behalf of metaphysics [...]. (IV, 260)

To Hume's position (or what he takes that to be) Kant then concedes "that we in no way have insight through reason into the possibility of causality [...]. Nonetheless, I am very far from taking these concepts [sc. the categories] to be merely borrowed from experience, and from taking the necessity represented in them to be falsely ascribed and to be a mere illusion through which long habit deludes us". (IV, 310–311) In order to avoid the "law of association" (IV, 258) being the only available foundation of natural science, Kant introduces the distinction between judgments of perception and judgments of experience. Whereas judgments of perception only say something about my subjective perceptual situation, a judgment of experience is determining with respect to the object and therefore involves the employment of a category.⁵ In terms of this distinction Kant finally exemplifies Hume's problem and the role of pure concepts of the understanding as follows:

If a body is illuminated by the sun for long enough, then it becomes warm. Here there is of course not yet a necessity of connection, hence not yet the concept of cause. But I continue on, and say: if the above proposition, which is merely a subjective connection of perceptions, is to be a proposition of experience, then it must be regarded as necessarily and universally valid. But a proposition of this sort would be: The sun through its light is the cause of the warmth. [...] I therefore have quite good insight into the concept of cause, as a concept that necessarily belongs to the

⁴ The review which identifies Kant's *Critique* with an untenable idealism and even with skepticism was published in the *Göttingische Anzeigen von gelehrten Sachen* in 1782; it has been translated and edited by Sassen (2000, 53–58). Garve's original review was published as a supplement to the *Allgemeine Deutsche Bibliothek* in 1783, after Kant's rebuttal of the anonymous Garve/Feder review and his demand to the author for disclosing his identity; in this review there is neither the comparison with Berkeley and Hume nor the polemics of skepticism; see the translation of the Garve review in Sassen 2000, 59–77.

⁵ See IV, 297–301, 304–305, 309, 312.

mere form of experience, and into its possibility as a synthetic unification of perceptions in a consciousness in general [...]. (IV, 312)

This solution to Hume's problem, however, turned out to be not as convincing as Kant had thought, and there is good evidence that Johann Schultz's review of J. A. H. Ulrich's *Institutiones logicae* from 1785 pushed Kant to revise a large part of what he had said on the deduction of the categories up to that point.⁶

The main task of the deduction is to show that the categories, as "principles of the possibility of experience" (B 168), "can relate to objects" (A 85/B 117), that is, to explain, "how *subjective conditions of thought* can have *objective validity*" (A 89/B 122). By this Kant gives credit to Descartes as well as to Hume for stressing the essentially subjective origins of the activity of thought in the first case and the subjectivity of the perceptual basis of all empirical knowledge in the second. But this methodological similarity with regard to the subjectivity of the starting point of Kant's deduction turns out to be merely apparent. In fact, Kant's concept of judgment and therefore of experience is from the outset forthrightly opposed to the traditional 'subjective idealist' conception familiar from the 'way of ideas'⁷. From Kant's point of view, their concept of experience sets philosophers in this tradition 'at variance with themselves' (as Kant put it in an analogous context in reference to Newton)⁸, because it cannot provide room for ordinary or scientific judgments about spatio-temporal objects in the empirical world. In particular, it cannot account for what we take to be the objectivity (or necessary intersubjectivity) of such judgments. For Kant, transcendental apperception, in accordance with the tables of judgments and categories, is the ultimate presupposition for this objectivity, and it is therefore the presupposition of the synthesis of the manifold in the concept of an object. On this account, any sense impressions or perceptions are not self-standing entities, but owe their recognition to a conceptual framework. Without the synthetic unity of sense data we would not have any single perception

⁶ The review was anonymously published on December 13, 1785, in the *Allgemeine Literatur-Zeitung*; see the translation in Sassen 2000, 210–214.

⁷ With this Lockean kind of thinking (which has its own roots in Cartesianism) in mind, Kant addresses the reader of the Dialectic chapter: "I entreat those who take philosophy to heart (which means more than is commonly supposed) [...] to take care to preserve the expression *idea* in its original meaning, so that it will not henceforth fall among the other expressions by which all sorts of representations are denoted in careless disorder". (A 319/B 376) The 'original meaning' is of course that of Plato's (at least in Kant's eyes).

⁸ See Kant IV, 515.

as part of our objective knowledge. Thus, it is the unity of the subject that establishes the objectivity of judgments.⁹ Without the “unity of synthesis”, Kant says already in the A-edition of the first *Critique*, “it would be possible for appearances to crowd in upon the soul, and yet to be such as would never allow of experience.” (A 111) So, the objective reality of the categories, their justification, lies in the fact, that without them no cognition of any object whatsoever could take place.

Now, in his review Schultz agrees with Ulrich’s doubts about the “main foundation of the entire Kantian doctrine”, and claims “that the latter, no matter how much it contains of what is excellent, important, and indubitably certain, does not yet carry the sort of apodeictic conviction that would be necessary to an *unrestricted* acceptance of what is really its main purpose.”¹⁰ Focussing on what he takes to be the central flaw in Kant’s critical philosophy, Schultz complains: “The main element of *Kant’s* system, on which the true limitation of pure reason depends, rests primarily on the *deduction* of the pure concepts of understanding, which the *Critique of Pure Reason* sets out on pages 84–147. It is regrettable, therefore, that the author [sc. Ulrich] has not in the first instance examined *it*. But perhaps it was only its obscurity that prevented him from doing so, an obscurity that occurs primarily here, in this part of the *Critique* that should be the clearest [...]”¹¹ Schultz then leaves Ulrich’s *Institutiones* behind in order to criticize Kant’s position on his own behalf: if judgments of perception are some kind of experience, then the deduction of the categories holds not only for judgments of experience but also for judgments of perception – because these judgments of perception then also require categorial involvement. But this plainly contradicts Kant’s claims in the *Prolegomena*, where, as we have already seen, Kant characterizes judgments of perception as not involving any application of the categories. On the other hand, Schultz continues, if experience comprises only judgments of experience, then we need the categories and the proof of their objective reality only if we think that there in fact are judgments of universal and objective validity. But this premise, in turn, was the main target of Hume’s criticism that Kant wanted to overcome. For Hume, judgments of perception (in the sense of the *Prolegomena*) are all we have and all we need. Schultz concludes by suggesting the concept of a preestablished harmony as a possible way out of this dilemma.¹²

⁹ See e. g. A 117n.

¹⁰ Schultz 1785, in Sassen 2000, 212.

¹¹ Schultz 1785, in Sassen 2000, 213.

¹² The whole complex of “judgments of perception”, “judgments of experience”, the “sceptical Hume”, and the system which is “*preestablished* through the will of the

II

Kant immediately responded to Schultz's charge by inserting a long footnote to the Preface to the *Metaphysical Foundations of Natural Science*, where he announced a revision of the deduction of the categories. If one takes a closer look at Schultz's review, Kant's just mentioned footnote, and the B-deduction, the connection between these texts becomes clearly evident. In the footnote Kant not only addresses Schultz's attack on the distinction between judgments of perception and judgments of experience, he also takes on the 'Humean doubts' that Schultz had brought up as well. Indeed, in the footnote, as well as in § 27 of the B-deduction, Kant urgently warns against "taking refuge in a preestablished harmony", or a "preformation-system" (B 167), "to explain the surprising agreement of appearances with the laws of the understanding" (IV, 476n.). So it seems that Kant replies in the footnote, as well as in the B-deduction, to precisely the problematic complex of judgments of perception, Humean doubts and preformation system to which Schultz had called attention in his review. In the remainder of this section, I shall fortify this claim and thereby try to open a new perspective on the B-deduction.

In the footnote to the *Metaphysical Foundations*, Kant shows himself ironically very grateful for Schultz's comments and discloses that he now sees the solution to Schultz's problem:

The obscurity that attaches to my earlier discussions in this part of the deduction (and which I do not deny), is to be attributed to the common fortunes of the understanding in its investigations, in which the shortest way is commonly not the first way that it becomes aware of. Therefore, I shall take up the next opportunity to make up for this deficiency (which concerns only the manner of presentation, and not the ground of explanation, which is already stated correctly there), [...], and, as I now understand it, [it can be solved with] just as much ease, since it can almost be accomplished through a single inference from the precisely determined definition of a *judgment* in general (an action through which given representations first become cognitions of an object). (IV, 475–76n.)

I think we should view the B-deduction as "the next opportunity", and I am convinced that there we can find the answer to Schultz's problem.

Henrich (1969) argued that the B-deduction of Kant's first *Critique* has a "two-steps-in-one-proof" structure.¹³ The deduction, according to this interpretation, falls into two parts, each of which is to represent a necessary but distinct argument for establishing the final conclusion, that

creator" is to be found at the end of the review; see Schultz 1785, in Sassen 2000, 213–214.

¹³ Henrich 1969, 642.

all synthesis, through which even perception itself becomes possible, stands under the categories, and since experience is cognition through connected perceptions the categories are conditions of the possibility of experience and are thus also valid a priori of all objects of experience. (B 161)

The first step (§§ 15–20), according to Henrich, “established that intuitions are subject to the categories *insofar* as they, as intuitions, already possess unity”¹⁴. In the second step (§§ 21–27), Kant goes into the details of that ‘unity’ and shows that “[i]n our representations of space and time [...], we have intuitions which contain unity and which at the same time include *everything* that can be present to our senses. For indeed the representations of space and time have their origin in the forms of our sensibility, outside of which no representations can be given to us. We can therefore be sure that every given manifold without exception is subject to the categories.”¹⁵

I shall not address the question of whether Kant’s proof strategy succeeds from this point of view. Moreover, I shall also not discuss the critical debates on Henrich’s ‘restriction thesis’, i. e., the view that “[t]he result of the proof in section 20 is [...] valid only for those intuitions *which already contain unity*.”¹⁶ As I understand Henrich (and Kant), the task of the second proof step is not to show that the categories apply to both ‘intuitions which already contain unity’ and those which do not. Rather, the second proof step has to show that apart from unified intuitions there simply are no intuitions at all that can achieve the status of knowledge for sensible beings – or, more precisely, for beings with the distinctive forms of human (spatio-temporal) sensibility. Thus, the categories are “valid a priori of all objects of experience” (B 161), or “all objects of our senses”, as Kant already put it in the proof sketch of § 21.

In my view, the second proof step, i. e. §§ 21–27 of the deduction cannot be understood correctly without taking Schultz’s problem and Kant’s sketch of a response in the *Metaphysical Foundations* into account. In the following I will list the steps of the main inference, which I take to be the “almost [...] single inference from the precisely determined definition of a *judgment* in general” Kant refers to in the *Metaphysical Foundations*.

The first proof step of the B-deduction is supposed to have shown that “[t]he manifold that is given in a sensible intuition necessarily belongs under the original synthetic *unity* of apperception, since through this alone is the *unity* of the intuition possible” (B 143; my emphasis), and “[t]hus

¹⁴ Henrich 1969, 645.

¹⁵ Henrich 1969, 646.

¹⁶ Henrich 1969, 645. – See Allison 2004, 161, for a critical approach and further readings.

the manifold in a given intuition also necessarily stands under categories” (ibid.). The task of the second proof step (which includes the ‘almost single inference’) is to show “*how* experience is [...] possible by means of these categories, and only through these categories alone” (IV, 475). By implication, if this task is achieved, we are assured of the objective reality of the categories, i. e., that the categories are not only valid for *thinking* an object (that might exist or not), but also for *cognizing* it.¹⁷

In order to understand the “almost [...] single inference from the precisely determined definition of a *judgment* in general”, we have to go to the end of the first step of the B-deduction, where Kant first ‘finds’ that,

P1 “a judgment is nothing other than the way to bring given cognitions to the *objective* unity of apperception” (B 141),

and secondly defines this “way” by referring back to § 19 (which includes P1):

P2 “That action of the understanding [...] through which the manifold of given representations [...] is brought under an apperception in general, is the logical function of judgments (§ 19).” (B 143)

He then goes on to summarize the first proof step by commenting on this concept of manifold:

P3 “all manifold, insofar as it is given in *one* empirical intuition, is *determined* in regard to one of the logical functions for judgment”. (B 143)

For Kant, we now have a ‘precisely defined concept of judgment’, but still need to know “*how* experience is possible by means of these categories”, i. e. what exactly the work of the understanding amounts to with respect to the “manifold of *given* representations”. In other words, we still need an explanation of the ‘givenness’ of the manifold, that Kant refers to in P1 through P3, in the *Metaphysical Foundations*, and in § 21.¹⁸

¹⁷ Kant draws this distinction in § 22: “To *think* of an object and to *cognize* an object are [...] not the same.” See Thöle 1991, 281, and Allison 2004, 162, for an interpretive separation of the two proof steps of the B-deduction according to which the first step discusses the role of the categories with respect to the *thought* whereas the second takes up the issue of their role in *perception*. See also note 20 below.

¹⁸ In the *Metaphysical Foundations*, Kant defines “*judgment* in general [as] an action through which given representations first become cognitions of an object” (IV, 475n.); the relevant passage in § 21 of the B-deduction is: “In the sequel (§ 26) it will be shown from the way in which the empirical intuition is given in sensibility that its unity can be none other than the one the category prescribes to the manifold of a given intuition in general according to the preceding § 20” (B 144–45). With reference to the preceding first proof step, the passage continues: “In the above proof [...] I still could not abstract [...] from the fact that the manifold for intuition must already be *given* prior to the synthesis of understanding and independently from it;

So, in § 26 Kant characterizes the *synthesis of apprehension* as:

P4 “the composition of the manifold in an empirical intuition, through which perception, i. e., empirical consciousness of it (as appearance), becomes possible.” (B 160; this part of the inference builds on what Kant has said in §§ 21–25)

He then uses this notion of the *synthesis of apprehension* to develop his argument as follows:

P5 “We have *forms* of outer as well as inner sensible intuition a priori in the representations of space and time, and the synthesis of the apprehension of the manifold of appearance must always be in agreement with the latter;” (B 160)

P5* “since it [sc. the synthesis]¹⁹ can only occur in accordance with this form.” (ibid.)

P6 “But space 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”. (ibid.)

C1 “Thus even *unity of the synthesis* of the manifold, outside or within us, hence also a *combination* with which everything that is to be represented as determined in space or time must agree, is already given a priori, along with (not in) these intuitions, as condition of the synthesis of all *apprehension*.” (B 160–61)

P7 “But this synthetic unity [sc. of apprehension] can be none other than that of the combination of the manifold of a given *intuition in general* in an original consciousness, in agreement with the categories, only applied to our *sensible intuition*.” (B 161)

P7* because: “It is one and the same spontaneity that, there under the name of imagination and here under the name of understanding, brings combination into the manifold of intuition.” (B 162n.; this part of the inference builds on what Kant has said in §§ 15–18)

C2 “Consequently all synthesis, through which even perception itself becomes possible, stands under the categories;” (B 161)

P8 “and since experience is cognition through connected perceptions,” (ibid.)

C3 “the categories are conditions of the possibility of experience,” (ibid.)

C4 “and are thus also valid a priori of all objects of experience.” (ibid.)

First of all, the complexity of this inference – and there are even more subsidiary arguments in previous parts of the *Critique* that Kant implicitly refers to here – should suffice to justify the word ‘almost’ Kant uses to describe this ‘almost single inference’. Of course, one can question this extensive argument in several ways, with reference to its intrinsic cogency,

how, however, is here left undetermined.” So, it should be clear that the latter is the task of the second proof step.

¹⁹ The German original has *geschehen* for *occur*, therefore the ‘it’ can only refer to the ‘synthesis’; a manifold and an appearance could *occur*, but not *geschehen*.

to its coherence with other parts of the *Critique*, or to related issues. One could ask whether this inference is comprehensive enough to show what it is supposed to show, especially, whether it needs further support from the Transcendental Aesthetic or whether it leads to problems or even inconsistencies with what Kant claims there.²⁰ To put these issues in context, or even to evaluate them, however, goes well beyond the scope of this paper. Rather, in focussing primarily on the conclusion of Kant's inference, I shall instead restrict my examination to its relation with Kant's theory of perception, as this theory is decisively clarified, in particular, in the second edition deduction.

The second step of the B-deduction invokes the concept of an "intuition in general" (B 145), in which the manifold is given, in order to prove that "the way in which the empirical intuition is given in sensibility" (ibid.) itself requires a synthesis, which is "an effect of the understanding on sensibility" (B 152). This "synthesis speciosa" (B 151), or as Kant also calls it, this "motion, as action of the subject" (B 154) produces spatio-temporal 'figures', and thereby provides the brute material of sensations with forms, insofar it is guided by unifying concepts of the understanding, the categories. So, the 'almost single inference' connects

²⁰ See A 20–21/B 34–35, A 24–25/B 39, A 31–32/B 47; for a sympathetic interpretation of §26 of the B-deduction see Allison, who nevertheless criticizes Kant's argument as "extremely perfunctory" (Allison 2004, 191) and "quite sparse" (193). Allison's interpretation of the two steps of the B-deduction differs from the one put forward here in some significant respect. He very sharply separates the two steps: "The basic point is simply that the first part of the B-Deduction is concerned with the role of the categories in the *thought* of objects, that is, in judgment, whereas the second is concerned with their role in perception and experience." (476n.11) One of the goals of the present paper is to show that these parts do not deal with different topics; it is already in his summary of the first step in §20 (see P3 above) that Kant relates his conclusion to "empirical intuition" (B 143; on this point see also Keller 1998, 90–91). Rather, the second step has to cash out what the determining synthesis of the manifold, that Kant mentions in P1–P3, amounts to. On my account (which is, I hope, an essential improvement of my treatment of the issue in Pollok 2001, 137–149), the 'almost single inference' is the missing link between the two steps of the proof. This is why I broadened the focus on the B-deduction by taking Kant's announcement of the revision in the *Metaphysical Foundations* into consideration. Although Thöle 1991, 274–280, whose interpretation is close to Allison's, mentions Schultz's review and Kant's reply in the *Metaphysical Foundations*, he does not relate the 'precisely defined concept of judgment' to the manifold of given representations, as is necessary for identifying that 'almost single inference'. Guyer 1987, 94–102, also emphasizes Kant's attempts to 'ground' the deduction on the concept of judgment and gives textual support from the *Prolegomena* (§§ 18–20) and Kant's notes from the period 1783–84, but he does not deal with the 'almost single inference' from the concept of judgment, as announced in the *Metaphysical Foundations*.

the ‘well-defined’ concept of a judgment and the concept of perceptual manifoldness by showing that the judgmental unity as a categorial unity is also the only possible unity of “all manifold, insofar as it is given in *one* empirical intuition”²¹. The decisive move takes place in C1. It restricts the whole argument and hence the use of the categories to perceptions as *spatio-temporally* determinable entities, not as merely subjective impressions such as dreams or mere fancies; if these impressions cannot objectively be determined within a spatio-temporal framework (which is one of their essential properties), they will not reach the status of experience. This is what the normative sense of the categories as *standards of knowledge* amounts to.

According to Kant’s incorporation of the scholastic *forma non afficit* doctrine²², we cannot conceive of merely passive impressions already including the spatio-temporal complexity of our experience, as Hume would have it. Rather, we have to explain how mere sensations obtain first their spatio-temporal forms in order to become experience. This has not been shown in the first step of the B-deduction where Kant was primarily concerned with the role of the transcendental apperception in determining all the manifold – “insofar as it is given in *one* empirical intuition” (B 143) – in regard to the logical functions of judgments (P3). After the first proof step one could still think of a conceptual determination of ‘empirical intuitions’ in a Humean sense – and then deny its necessity on the grounds that the complexity of this manifold of ‘empirical intuitions’ already contained all that is required for subjective knowledge or a Humean world. In contrast to this Humean concept of experience, however, the synthesis of apperception is required not only for providing the manifoldness with a *conceptual* form, but also for the specifically *spatio-temporal* form it happens to possess. This manifoldness has a *material* aspect, the brute sensation by which the subject is affected, and a *formal* aspect, the “transcendental synthesis of the *imagination*, which is an effect of the understanding on sensibility” (B 152), by which the sensation obtains its spatio-temporal structure in the first place. Or, as Kant claims in P6 with reference to the argument of § 24, space and time cannot

²¹ B 143; the emphasized ‘one’ is owed to the synthetic or *unifying* action of the subject. Henrich 1969, 645, draws attention to this emphasis by explaining: “Unlike English, in German the indefinite article (*ein*) and the word unity (*Einheit*) have the same root. This made it possible for Kant to express through the capital letter not the distinctness of any arbitrary intuition as opposed to others (*singularity*), but rather its inner *unity*.”

²² Latin for ‘the form does not affect us’; see Brandt 1998 for Kant’s version of this hylomorphism in the Transcendental Aesthetic.

be conceived of objectively unless we assign to them the *unity* of a manifoldness. In contrast to merely abstract ‘forms of intuition’ (spatiality and temporality) we thereby obtain ‘formal intuitions’, i. e. *determinate* space and time. This unity, in turn, which is already required for geometry (cf. B 160n.) cannot be given a posteriori. Rather, it is given a priori (C1), or, as Kant clarifies this kind of ‘givenness’, it is owed to the spontaneity of our imagination and understanding (P7–P7*).

Kant’s theory of “figurative synthesis [or] synthesis speciosa” (B 151–55) as “an effect of the understanding on sensibility” (B 152) is the replacement for the bottom-up, quasi-empiricist threefold synthesis argument of the A-deduction and thereby an improved elucidation of one of the most central claims which Kant already makes in the A-edition, namely, that the “same function that gives unity to the different representations *in a judgment* also gives unity to the mere synthesis of different representations *in an intuition*, which, expressed generally, is called the pure concept of understanding.”²³ It is this same-synthesis-argument that relates understanding to sensibility, or spontaneity to receptivity (as Kant distinguishes them in the beginning of the Transcendental Aesthetic at A 19 / B 33). Whereas the first step of the B-deduction is an attempt to show that the manifold of an intuition belongs to the “necessary *unity* of self-consciousness”²⁴ by means of the (unifying) synthesis of the understanding, the second step has the task of showing that the very same synthesis is responsible for the *spatio-temporal unity* of the manifold, and only thereby can mere sensations be transformed into cognitions properly speaking. Of course, there may be many states of mind other than *cognition*, but all of them amount to no more than mere idiosyncratic utterances (if communicable at all) in contrast to judgments.²⁵

According to Kant, it is precisely this that can be argued for against Schultz’s ‘Humean doubts’ and without Schultz’s ‘pre-established harmony’²⁶. After illustrating the functions of the categories of quantity and of causality with examples of the “empirical intuition of a house” and

²³ A 79 / B 104–105; I am indebted to discussion with Lanier Anderson on this point.

²⁴ B 144; my emphasis.

²⁵ Thus, in my view, the contrast between the first step of the B-deduction (which concerns only a ‘manifold of a given intuition *in general*’) and the second (which focusses on our specifically spatio-temporal forms of intuition) has the effect of reducing the purely ‘given’ elements of experience to mere effects on our sensibility (brute sensations) that are not even possessed of spatio-temporal form. Kant’s ‘answer to Hume’ in the second step then shows that no spatio-temporal objects of experience at all are merely ‘given’, independently of the conceptual activities of the understanding.

²⁶ See note 12 above.

the “freezing of water” (B 162), Kant in the final paragraphs of the B-deduction responds to the Ulrich/Schultz view that “the categories [...] are applicable not just to appearances, but similarly to *things in themselves*. Accordingly, they have not only an *immanent* but also a transcendent use.”²⁷ Kant takes up this issue by arguing that the required objective necessity of the categories, i. e. their necessary reference to objects, can only be understood if we leave behind the notion of a *recognizable* mapping between things in themselves and their appearances. We have to restrict our knowledge to the world of spatio-temporal appearances. Of course, the understanding cannot prescribe a priori laws to *nature in itself*, but this is not a theoretical flaw, because all we know about comes down to appearances anyway, as Kant summarizes the main result of that ‘almost single inference’:

since all possible perception depends on the synthesis of apprehension, but the latter itself, this empirical synthesis, depends on the transcendental one, thus on the categories, all possible perceptions, hence everything that can ever reach empirical consciousness, i. e., all appearances of nature, as far as their combination is concerned, stand under the categories, on which nature (considered merely as nature in general) depends, as the original ground of its necessary lawfulness [...]. (B 164–65)

Only this “system of the *epigenesis* of pure reason”, i. e. the constitution of experience out of sensation on the one hand and pure concepts as well as forms of intuition on the other, rather than the “*preformation-system* of pure reason” (B 167) Schultz had advocated, can account for judgments that refer to objects. Thus, the transcendental deduction of the categories alone prevents us from the “mere illusion from custom” of an objectivity, “as Hume has it” (IV, 476), because we now see “*how* experience is [...] possible by means of these categories, and only through these categories alone” (IV, 475), which is the opposite of “precisely what the skeptic wishes most” (B 168). As another revision owed to Schultz’s criticism about things in themselves (although not in Schultz’s sense), this restriction of knowledge to appearances as conceptually structured intuitions, leaves – or better opens – room for moral reasoning about “the subject and its willing” (B 166n.), where we reach objectively valid conclusions with respect to proper maxims of the will rather than theoretical cognition.

With this argument of the second proof step, the aim of which is to show “*how* experience is [...] possible by means of these categories” (IV, 475), the distinction between judgments of perception and judgments of experience consequently vanishes from Kant’s thinking. He no longer

²⁷ Schultz 1785, in Sassen 2000, 212.

invokes this distinction in connection with the categories.²⁸ Rather, Kant defines the general concept of a judgment as a judgment of experience.²⁹ Moreover, in the very same paragraph he separates this concept of judgment from what he had taken to be *judgments* of perception in the *Prolegomena*. A judgment is “a relation that is *objectively valid*, and that is sufficiently distinguished from the relation of these same representations in which there would be only subjective validity, e. g., in accordance with laws of association.”³⁰ The ‘judgment of perception’, as introduced in the

²⁸ The distinction is prominently mentioned in the *Logik Jäsche*, but on the one hand, this work is a mere compilation by G. B. Jäsche of what Kant had presented in his lectures over the course of 40 years, and on the other hand, and even more importantly, the relevant § 40 (IX, 112–113) does not even mention Kant’s critical theory of categories, let alone the kind of application required for transforming judgments of perceptions into judgments of experience. So, what we are told about this distinction in the *Jäsche Logik* does not go a single step beyond what G. F. Meier had written in §§ 319–324 of his textbook *Auszug aus der Vernunftlehre* (Halle: J. J. Gebauer, 1752; reprinted in Kant XVI, 674–679), which stands behind Kant’s lectures, on ‘*anschauende Urtheile*’ and ‘*Nachurtheile*’ that Meier subsumed both under the heading ‘*Erfahrungsurtheile*’. I shall immediately come back to Kant’s treatment of them in the *Critique of the Power of Judgment*. – Allison 2004, 178, following others, is of the opinion “that there is no contradiction between the *Prolegomena* and the first *Critique*, since the latter’s distinction between two kinds of unity should be viewed as a change of subject rather than a correction of the former’s distinction between two kinds of judgment.” But Allison himself goes on to admit: “The problem, however, is that this reading does not accord completely with the text of the *Prolegomena*, because Kant also takes the distinction to characterize successive stages in a cognitive process in which the understanding proceeds from merely subjectively valid ‘seemings’ or ‘perceivings’ to objectively valid cognitions.” (181) And finally: “Nevertheless [...] the *Prolegomena*’s account of empirical cognition as involving a move from perception to experience has an echo in § 26 of the B-Deduction, albeit not in terms of a distinction between two kinds of judgment.” (Ibid.) But the latter part of this quotation, at least in my eyes, makes a difference, because it turns out that, if ‘judgments of perception’ are no longer correctly to be taken as *judgments*, it is impossible for a ‘Humean scientist’, according to Kant, to make judgments in the proper sense. Or to put it shortly, if Humeans make judgments, they actually invoke the categories. At least, this is the implicit lesson from the second proof step of the B-deduction.

²⁹ See B 141.

³⁰ B 142; it must be kept in mind that this distinction between *relations* that are judgments and relations that are not, is drawn in transcendental logic, not in general or formal logic, because the latter does not deal with the ‘agreement with an object of possible cognition’. So, formally speaking, ‘relations’ of sensual or aesthetic representations, are of course judgments, but they cannot be dealt with in transcendental philosophy (as the *Prolegomena* suggested); see note 35 below, together with the paragraph to which it is appended. For a similar approach see Stuhlmann-Laeisz 1976, 55–59, and Keller 1998, 84–86, differing from Prauss 1971, 280–88, Longuenesse 1998, 180–88, and Allison 2004, 179–85.

Prolegomena, may either invoke (a) merely subjective representations that cannot reliably be identified as perceptions, or (b) the logical functions of judgments (without being a judgment properly), or it is a judgment by means of its categorial constitution (and thereby ceases to be a 'judgment of perception'). According to the second step of the B-deduction, even the synthesis of apprehension, "through which even perception itself becomes possible" (B 161), stands in need of concepts of the understanding.³¹

This, in turn, leads to an interpretation of the second proof step in some ways different from that put forward by Paul Guyer who asks:

why does Kant restrict his result in sections 20 and 21, and appeal to the unity of space and time for a conclusion that should already have followed from the original unity of apperception? We can only conjecture that Kant does this out of a tacit recognition that all is not well with his concept of apperception, [...] and that he looks to the unity of space and time as a less controversial ground for the proof of the universal objective validity of the categories.³²

I do not think that this conjecture is necessary. In fact, since the section on the "synthesis of apprehension" in the A-deduction (see A 99) already deals with the concept of inner sense, i. e. time, Kant would not have had so much reason to replace the A- with the B-version on that account. In addition, Kant deals with this concept of apperception in his later essay on the "Real Progress, which Metaphysics Has Made Since the Times of Leibniz and Wolff in Germany" as well as in his *Opus Postumum* drafts.³³ I would rather suggest that Schultz's criticism of the distinction between judgments of perception and judgments of experience showed Kant the necessity of rethinking the kind of reflection that leads to judgments of experience. The result is that we cannot imagine any synthesis of apprehension at all without a unifying concept. Therefore, even judgments of perception are not pre-categorial, yet somehow conceptu-

³¹ In relation to Kant's revision of the transcendental deduction it is interesting as a kind of presumptive evidence that on page 78 of his own copy of the first edition of the *Critique* Kant suggests an alteration of the following sentence on the margin. In the definition, that "Synthesis in general is, as we shall subsequently see, the mere effect of the imagination, of a blind though indispensable function of the soul [...]", he replaces the clause "of a blind though indispensable function of the soul" with "of a function of the understanding". With this alteration, the categories as the concepts of the understanding can explicitly be taken to structure our apprehension. See also Allison 2004, 481–82n.51, who already wondered about Kant not having incorporated this change in the second edition.

³² Guyer 1992, 154.

³³ See especially XX, 270–276, of that essay which was written in the 1790's, and published by F. Th. Rink in 1804, and the "7. Convolut" of the *Opus Postumum*, published in volume 22 of the Academy Edition.

al entities. Instead, they invoke pure concepts, at least those of the first two titles (Quantity and Quality), which are not concerned with the “existence of the objects of a possible empirical intuition”, as Kant put it in the “Principles” chapter (A 161 / B 199).³⁴

In his third *Critique*, Kant finally makes sure that there is very little room for judgments that deal verbally with objects, but have in fact only subjective validity:

in order not always to run the risk of being misinterpreted, we will call that which must always remain merely subjective and absolutely cannot constitute a representation of an object by the otherwise customary name of ‘feeling’ [*Gefühl*]. The green color of the meadows belongs to *objective* sensation, as perception of an object of sense; but its agreeableness belongs to *subjective* sensation, through which no object is represented, i. e., to feeling, through which the object is considered as an object of satisfaction (which is not a cognition of it). (V, 206)

Apart from these ‘judgments of perception’ that articulate feelings of pleasure and pain, no other ‘judgment of perception’, e. g. “the room is warm, the sugar sweet, the wormwood repugnant”³⁵, or “[i]f the sun shines on the stone, it becomes warm”³⁶, can ‘remain merely subjective’.

³⁴ The latter point fits well in my above interpretation of the second proof step of the B-deduction, because there Kant could still leave open the question of which of the categories are required in order to structure our perception by means of a synthesis of apprehension. There is a division of labor between the deduction on the one side and the schematism and the principles on the other, that Thöle 1991, 286–87, seems to neglect, when he considers but then discards Henrich’s interpretation that I adopt and further elaborate here (see Henrich 1969, 646). I shall briefly come back to the relationship between the deduction, the schematism, and the principles in section III below.

³⁵ IV, 299n.; as a matter of fact, in contrast to his claim in the third *Critique*, where Kant assigns secondary qualities like the “green color” an *objective* status, in the *Prolegomena*, where he mentions these examples that include secondary qualities of intensive magnitudes as well, he takes them to be “merely subjectively valid” (IV, 299n.). What lies behind this difference, as I take it, is that only by the end of the 1780’s Kant developed a sophisticated enough theory of the sensual feelings of agreeable/disagreeable in contrast to the aesthetic feelings of pleasure/displeasure; see §§ 3–7 of the *Critique of the Power of Judgment*. The difference between certain stages of Kant’s development seems to be blurred, when Longuenesse reads the third *Critique*’s standpoint already into that of the *Prolegomena*: “‘Sugar is sweet’ should be read as ‘Sugar tastes sweet, its taste is pleasant’; ‘The room is warm’ should be read as ‘It feels warm (pleasant) in the room’.” (Longuenesse 1998, 192–93) Longuenesse admits, however, that because of textual problems “Kant depends heavily on the charity of his reader” on her account.

³⁶ IV, 301n.; this example invokes the categories of quality (intensive magnitudes), just as much as the example of the “pressure of weight” does, which Kant mentions in § 19 of the B-deduction.

Rather, the latter refer to objects by means of their categorial constitution, or so thought Kant at the end of the 1780's.

This is the negative result of the second step of the B-deduction. The concept of a supposedly pre-categorial *judgment* of perception is an empty concept. It might "be possible for appearances to crowd in upon the soul, and yet to be such as would never allow of experience" (A 111), but all we *know* – strictly speaking – are unified perceptions and this unity in turn is conceptual, and thus not itself a perception.

What sets Kant apart from his predecessors then is that he establishes a new concept of experience by taking the concept of a *judgment* as the centerpiece of epistemology. Judgments can be, and often are based on perceptions. As such, they can be preliminary or unjustified or, of course, even wrong. But they cannot, strictly speaking, be private. Categories are not *my* concepts, they are structural features of anything that may count as experience.

III

If we know "how experience is [...] possible by means of these categories, and only through these categories alone" (IV, 475), we are ensured by implication, as we have seen, that the categories are not only valid for *thinking* an object (that might exist or not), but also for *cognizing* it.³⁷ Although laying out the argument for this was "merely *meritorious*", according to Kant, the more "*compulsory*" task of showing "the determination of the limits of pure reason" (IV, 474) has thereby also been achieved, as Kant claims in the "Result of this deduction" (§ 27), and as I referred to in the context of 'the epigenesis of pure reason' in the previous section.

Between these and other passages, however, there is a tension concerning the relevance of the transcendental deduction that finally needs to be addressed in this context. First, in § 26 Kant identifies the first step of the deduction as *the* transcendental deduction,³⁸ which means that 'the almost single inference' would not belong to the transcendental deduction and would therefore be "merely *meritorious*". Secondly, however, at the interface between the two proof steps, Kant claims that in the first step "the beginning of a *deduction* of the pure concepts of the understanding has been made", and that it is only in § 26, i. e. the second step, that

³⁷ See notes 17 and 20 above, and the paragraphs to which they are appended.

³⁸ See B 159: "in the *transcendental deduction* [...] their possibility[sc. of the categories] as a priori cognitions of objects of an intuition in general was exhibited (§§ 20, 21)."

“the aim of the deduction will first be fully attained” (B 144–145); and accordingly the headline of that very same section reads: “Transcendental deduction of the universally possible use of the pure concepts of the understanding in experience”. But thirdly, if that is correct, the whole transcendental deduction would be “merely *meritorious*” for “the determination of the limits of pure reason” (IV, 474), a claim which is counterbalanced by the claim that “*no* a priori cognition is possible for us except solely of objects of possible experience”, which Kant calls the “Result of *this* deduction”³⁹. Adding to these puzzles, Carl L. Reinhold, in an oft-neglected letter to Kant, complains about what he gently calls a “seeming difficulty”: “In the Note beneath the text of the Preface to the *Metaphysical Foundations* [...] you write very pointedly that the main foundation of your system is secure ‘even without a complete deduction of the categories’ – on the other hand in both the first and second editions of the *Critique of Pure Reason* [...], ‘the indispensable necessity’ of that deduction is asserted and demonstrated.”⁴⁰

Although the tension of the just quoted passages cannot be fully resolved, taking Kant’s response to Reinhold into account may shed some light on his view. In his paper “On the Use of Teleological Principles in Philosophy”, published by Reinhold and Ch. M. Wieland in the *Teutscher Merkur* in 1788, Kant calls the footnote in the *Metaphysical Foundations* a “cause for misunderstanding” and attempts to clarify it by distinguishing between a “*negative* purpose” and a “*positive* purpose” of the *Critique* (“a work of quite a scope”): whereas the former concerns the claim that the categories alone (devoid of sensible intuition) cannot yield any cognition of objects, the latter concerns the possibility of their objective validity in relation to the empirical. For a proof of the former as opposed to the latter, Kant continues, the metaphysical deduction, or the “*exposition* of the categories (as logical functions only applied to objects in general)”⁴¹ will do. From this point of view, the ‘meritorious’ claim of the footnote only holds for the negative purpose. For the positive purpose the full transcendental deduction, i. e. with both steps, is indispensably required. Since the *metaphysical* deduction appears to be something that Schultz had not cast doubt on, Kant is entitled to take the accomplish-

³⁹ B 165–166; my emphasis.

⁴⁰ Kant 1999, 266; X 500; letter of October 12, 1787; the passage in the *Critique* Reinhold refers to is at A 88 / B 121, where Kant speaks of an “unavoidable necessity of such a transcendental deduction”.

⁴¹ VIII, 184; my translation. This distinction between a positive and a negative purpose of the *Critique* is not equivalent with the one Kant mentions in the Preface to the 2nd ed. of the *Critique*, B xxiv–xxv.

ment of the ‘negative purpose’ for granted by Schultz.⁴² But the textual (and also systematic) problem still remains, namely, that it is only the transcendental deduction of the categories, that can rebut the “suspicion about the [...] limits of their use” (A 88/ B 120), by showing that “the categories are *nothing other* than these very functions for judging, *insofar* as the manifold of a given intuition is determined with regard to them”.⁴³

As I argued in the previous section of the present paper, it cannot be the case that the whole B-deduction concerns the ‘almost single inference’, because the necessary definition of a judgment in general is only provided in § 19. Therefore, that ‘meritorious’-claim together with the argument it is attached to, namely “*how* the categories make [...] experience possible” (IV, 474), only concerns the second proof step. The first step, according to my interpretation, has the task to show *that* a “manifold that is contained in an intuition that I call mine is represented as belonging to the *necessary* unity of self-consciousness through the synthesis of the understanding, and this takes place by means of the category.”⁴⁴

⁴² Schultz only speaks of “obscure matters” with regard to that part of the *Critique*, “on which the true limitation of pure reason depends, [...] pages 84–147” (Schultz 1785, in Sassen 2000, 213). So, he identifies that ‘negative purpose’ with the *transcendental* deduction, and Kant corrected (he thought) that view in the *Metaphysical Foundations* footnote.

⁴³ B 143; my emphases.

⁴⁴ B 144; to argue that the second proof step includes the answer to the “question *how* the categories make [...] experience possible” (IV, 474) does not entail that it is only concerned with the subjective conditions of the applicability of the categories. Rather, § 26 is concerned with their “validity” (B 145), as was the first part; see Henrich 1969, 643, against Paton 1936, 501, who, although not engaging with the whole array of Kant’s conflicting claims, seems to be right “that the distinction of ‘*that*’ and ‘*how*’ was not clear in Kant’s mind.” (Paton 1936, 529) With respect to the second proof step my approach seems to be similar to Longuenesse’s, who argues that Kant’s aim there is “to radicalize his deductive procedure by reinterpreting, in light of the demonstration he has just provided, *the manner in which things are given to us* [...].” (Longuenesse 1998, 213) But from the present point of view this interpretation fails to account for the conclusion (C2) of the ‘almost single inference’, because with the latter, as shown above, Kant rules out the possibility of ‘judgments of perception’ in the sense of the *Prolegomena*, which Longuenesse attempts to reconcile with the B-deduction (see Longuenesse 1998, 180–88). With this conclusion, however, it is incompatible “that the categories have a role to play ‘at each end’ of activity of judging: as ‘mere logical functions of judgment,’ they play a role in guiding reflection of the sensible given with a view to forming empirical concepts, and for this they must first also guide *synthesis in view of reflection*. But as *concepts*, they are applied only in judgments of experience.” (Longuenesse 1998, 199n.3; see also Longuenesse 2000, 95–98) In contrast to this, the conclusion (C 2) says that “all synthesis, through which even perception itself becomes possible, stands under the categories”. And by categories Kant means the ‘concepts of the understanding’,

In his first paper on the deduction Henrich already observed “that Kant has modified his language in section 20 and that thereby he reaches for the first time the paths of the deduction which was to offer a cogent argument.”⁴⁵ By endorsing this claim, I also agree with Henrich that “there is a substantial difference between the proofs of the first and the second editions”.⁴⁶ I need not commit myself to the historical claim that Kant read Schultz’s review only after finishing the first proof step of the B-deduction.⁴⁷ What is more important is that only with the second proof step does Kant accomplish what he later called the ‘positive purpose’ of the *Critique* in his response to Reinhold, i. e. the proof of the objective validity of the categories in relation to the empirical (cf. VIII, 184). So, pushed by Schultz’s charge of incoherence, the transition from the A- to the B-deduction concerns much more than “only the manner of presentation” (IV, 476), as Kant would have it.

Since it pertains to those parts of the *Critique* which Kant did not revise for the second edition, it is relevant on a larger scale to keep in mind that the deduction of the categories attempts to prove *that* “through them alone is experience possible” (A 93 / B 126) and only the Schematism and finally the Principles chapters are to show “*how* they make experience possible, and which principles of its possibility they yield in their application to appearances” (B 167). Neither the A- nor the B-deduction substantiates the “a priori *time-determinations* in accordance with rules” as “the true and sole conditions for providing them [sc. the categories] with a relation to objects, thus with *significance*” (A 145–46 / B 184–85). This is definitely left over to the Analytic of Principles. Therefore, we can mark the division of labor in terms of the lawfulness of our cognition, by saying that the deduction demonstrates that (even) the synthesis of apprehension is governed by the laws of the understanding, whereas the Analytic of Principles substantiates these laws by showing the *particular* ways of subsuming any intuition under concepts a priori.⁴⁸

not merely logical forms. On the latter point see also Wagner 1980, 363, and Allison 2000, 73–78.

⁴⁵ Henrich 1969, 656.

⁴⁶ Ibid.

⁴⁷ I can leave this an open question; but, according to my interpretation of that conceptual complex of judgments of perception, Humean doubts and the preformation system, at least the second part of the deduction was written after 1785.

⁴⁸ Regarding this division of labor my approach differs from that of Friedman 2003, 38–43, who assigns the task of ‘elaborating a pure doctrine of motion’ not only to the *Metaphysical Foundations*, but sees it as “centrally implicated in the argument of the transcendental deduction itself” (ibid. 35). I do not think that Kant’s references to geometry and natural science (cf. §§ 24, 26 of the B-deduction) should be seen

So, Kant's transcendental deduction should be seen as a philosophical explication of necessary presuppositions of valid claims of knowledge by showing that the employment of the categories is necessary for, but also restricted to, empirical claims of knowledge. The legitimacy of the possession or the usage of the categories, to put it in the juridical idiom, is deduced by the 'fact' that these categories are the 'a priori conditions of the possibility of experience' (cf. A 94/B 126). The determination of the subject of cognition and the determination of the object of that cognition presuppose particular criteria or rules according to which the subject and the object are to be determined. It was Kant's idea that both determinations can only be obtained in terms of judgments. And it was also Kant's idea that the rules or standards which govern the a priori determination of the object are at the same time the only possible a priori determination of the subject.⁴⁹ The "logical functions in all possible judgments" (A 79) are "functions of unity in judgments" (A 69/B 94), and as such they are the only possible expressions of the "transcendental unity of ap-

as (arbitrarily chosen) illustrations of the categories' application. But I am also not convinced, however, that "the categories make experience in general possible only in virtue of their prior application in Newtonian mathematical physics" (Friedman 2003, 42). I rather take geometry and, even more than that, natural science to be the final goal of Kant's argument, but this argument, at the end of the transcendental deduction, still lacks the complexity that is required for grounding scientific determinations of space and time in the forms of a judgment in general. In order to reach that latter stage Kant needs to lay out the epistemic structure of 'matter as the movable in space' (cf. *Metaphysical Foundations*, IV, 476–77, 480, 496, 536, 554), and this exposition along the four titles with three moments of categories in turn includes the Schematism, the System of all Principles of Pure Understanding, and the four chapters of the *Metaphysical Foundations*. See also Friedman 2001, and Pollok 2006, on these two related but also different accounts of the relationship between the first *Critique* and the *Metaphysical Foundations*.

⁴⁹ See Keller 1998, 92–112, for an instructive take on this topic. His approach is especially interesting, because he builds his interpretation of the relationship between knowledge of objects and knowledge of the subject on the conceptual relationship between judgment, objectivity, and self-consciousness, by arguing "that the first step [sc. of the B-deduction] attempts to show *that* all cognitively significant contents of our representations are candidates for judgments determined by categories", and that the second step has "to show *how* all sensible representational contents can be candidates for judgments requiring categories." (93) However, Keller does not dwell on that division of labor in the *Metaphysical Foundations* (cf. IV, 476n.), and although I agree with much of Keller's implementation of the argument, I cannot see decisive textual evidence for the claim that it is "specifically the problem of self-knowledge that leads Kant to divide the argument of the B-Deduction into two steps." (92) For an interpretation of Kant's treatment of the relationship between knowledge of the subject and knowledge of the object in the first step of the B-deduction see Pereboom 1995, esp. section 2.

perception”. This “transcendental subject of the thoughts”, Kant says, “is known only through the thoughts which are its predicates, and of it, apart from them, we cannot have any concept whatsoever, but can only revolve in a perpetual circle, since any judgment upon it has always already made use of its representation.” (A 346/B 404) To say more about the object and the subject results either in empirical judgments or in transcendent – not transcendental – judgments that lead us directly into antinomies or paralogsms.

What we can learn from Kant’s deduction of the categories, in the end, is that “Kant [...] clearly saw that both self-knowledge and knowledge of objects were intrinsically judgmental and necessarily involved logical structures as well as empirical inputs.”⁵⁰ And I fully agree with Guyer, when he generalizes: “Progress in philosophy is rarely dependent upon the formal soundness of an argument, but on the compelling force of a new vision, and from this point of view the transcendental deduction was a total success, turning Cartesian rationalism and Lockean empiricism into mere history and setting new agendas for subsequent philosophical movements.”⁵¹

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⁵⁰ Guyer 1992, 155.

⁵¹ Ibid. – I am most grateful to Lanier Anderson, Robert Brandom, Joshua Cohen, Dieter Henrich, Manfred Kuehn, Graciela De Pierris, Richard Rorty, Marcus Willaschek, and Allen Wood for helpful comments and conversations about earlier versions, and to audiences at Harvard University, Stanford University, and a workshop on Brandom’s *Making It Explicit* at Munich University. I owe special thanks to Michael Friedman for critically discussing this paper throughout its entire development, and thereby getting me more and more engaged with the issues. I would like to acknowledge the ZEIT Foundation for financial support during my stay at Stanford in 2005, as well as the Alexander von Humboldt Foundation and the Stanford Humanities Center for financial support during my stay at Stanford in 2006–07.

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