

# The Shortest Way

## *Kant's Rewriting of the Transcendental Deduction*

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### Abstract

This work examines Kant's remarkable decision to rewrite the core argument of the first Critique, the Transcendental Deduction of the Categories. I identify a two-part structure common to both versions: first establishing an essential role for the categories in unifying sensible intuitions; and then addressing a worry about how the connection between our faculties asserted in the first part is possible. I employ this structure to show how Kant rewrote the argument, focusing on Kant's response to the concerns raised in an early review by Johann Schultz. Schultz's dissatisfaction with the original Deduction lies in its second part, and Kant's subsequent revisions are focused on providing a better answer to this how-possible question. The new Deduction offers a more direct and convincing account of how our faculties work together to make experience possible.

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# Introduction

*'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.'* (MFNS, 4:476)<sup>1</sup>

For the 1787 second edition of the *Critique of Pure Reason*, Kant took the extraordinary step of rewriting its central argument, the Transcendental Deduction of the Categories. The differences between the two versions have led to much debate among Kant's readers, then and now, and our current understanding of the Deduction is shaped by the history of these debates. I return to Kant's decision to rewrite the Deduction, clarifying what happened at this crucial moment in his philosophical development.

My approach is as follows. I present a two-part structure common to both the original (A) and revised (B) Deductions. Each begins with a core argument, defending the objective validity of the categories by establishing their essential unity-supplying role. Kant then considers a concern about how this result can be possible given the independence of our cognitive faculties. In the second part of the Deduction, he addresses this 'how possible' worry by explaining how the faculties are connected in the required manner. I employ this two-part structure to examine an early response to the Deduction, a review by Johann Schultz. The changes in the B-Deduction, I claim, represent Kant's response to Schultz. The revised argument retains the same structure, but modified to address his concerns.

These topics—the common two-part structure and Kant's motivation for rewriting the Deduction—support one another. The common structure helps make sense of Schultz's doubts and Kant's response, while the historical account reinforces the continuity of this basic structure. By exploring both topics together, I hope to present a more cohesive interpretation of the Deduction.

The reading that emerges has implications for two current issues in Kant scholarship. First, it offers a novel solution to Dieter Henrich's influential puzzle regarding the two steps of the B-Deduction. Second, it clarifies the dependencies between intuitions and categories, and thus has implications for the lively debate on Kantian conceptualism. Here I engage with a prominent recent defence of the non-conceptualist reading (Allais 2015).

## 1. The Common Argument from Unity

At its heart, the Deduction aims to establish a necessary role for the categories in experience: showing that these 'subjective conditions of thought should have objective validity' (A89/B122). In both the A and B-Deductions, the crucial function of the categories is supplying unity. Kant holds that sensible intuition has a unity that must originate in the thinking self, in apperception (A107, B132). The various categories are simply different functions of this unity: different ways of unifying intuitional content.<sup>2</sup>

Both Deductions begin with this unity argument but carry it out differently. In the first part of the A-Deduction (section two)<sup>3</sup>, Kant examines the intellectual activity that makes experience possible, developing, in stages, a successively more complicated account of the synthesizing unity required for intuition. He begins with *apprehension*: collecting a manifold of sensible content into a single intuitive representation (A98-100). Kant then argues that this synthesis of apprehension presupposes a capacity to imaginatively *reproduce* the previously given sensible content (A100-102). Finally, this reproductive synthesis presupposes our ability to identify the reproduced content as belonging to one object—by *recognizing* the manifold as falling under a common concept (A103 ff.)

What initially seems a simple process of collecting the manifold is revealed to involve more sophisticated capacities, culminating in the conceptual synthesis of recognition. Concepts serve as rules governing the intuition of objects, and thereby serve as the source of their synthetic unity. As Kant puts it: ‘The thoroughgoing and synthetic unity of perceptions is precisely what constitutes the form of experience, and it is nothing other than the synthetic unity of the appearances in accordance with concepts.’ (A110) This conceptual unity originates in the thinking subject: ‘The numerical unity of this apperception therefore grounds all concepts a priori’ (A107). Apperceptive unity is expressed through the different categories (A111), which, through their essential role in this process, acquire objective validity.

We need not delve further into the details of Kant’s threefold synthesis. The key point is that Kant identifies the categories as the only possible source of intuitional unity. We find a similar argument in the first part of the B-Deduction. Kant is briefer here, but he again argues that the sensible manifold must be unified via the categories. The centrality of this point is indicated by the heading of §20, which summarizes the result of the first part: ‘All sensible intuitions stand under the categories, as conditions under which alone their manifold can come together in one consciousness.’ (B143) The emphasis is clearly on the unifying role of the categories. Indeed, Kant launches into the argument of the B-Deduction by insisting that the categories are our *only* source of unity. He writes: ‘all combination, whether we are conscious of it or not, whether it is a combination of the manifold of intuition or of several concepts ... is an action of the understanding, which we would designate with the general title synthesis’ (B130). As in the A-Deduction, intuitional unity presupposes the intellectual activity of understanding. As Kant states: ‘The supreme principle of all intuition in relation to the understanding is that all the manifold of intuition

stand under conditions of the original synthetic unity of apperception.’ (B136) As functions of this apperceptive unity, the objectivity of the categories is secured.

Though the details vary, the first parts of the A and B-Deductions each credit the categories with unifying sensible intuition. The key difference is that the B-Deduction operates at a higher level of generality. In A, Kant focuses on a unity specific to our sensibility: the temporal order of inner sense. He states: ‘all of our cognitions are in the end subjected to the formal condition of inner sense, namely time, as that in which they must all be ordered, connected, and brought into relations. This is a general remark on which one must ground everything that follows.’ (A98-99) Through the threefold synthesis, the categories are revealed as essential to unifying this temporally-ordered content. In the B-Deduction, by contrast, Kant defends a more general claim. Rather than focusing on temporal unity, he argues that *all* representational unity, ‘whether it is a combination of the manifold of intuition or of several concepts’ (B130), comes from the categories. With this universal claim in place, it is trivial to apply it to sensible intuition. Kant does so in §20, concluding that ‘the manifold in a given intuition also necessarily stands under categories.’ (B143)

Because its unity claim is pitched at a higher level, the B-Deduction lacks the phenomenological (or transcendental-psychological) flavour of the original threefold synthesis.<sup>4</sup> In section five, we will examine why Kant shifts to this more general principle. What matters now, however, is their common task: identifying the categories as supplying the unity that makes sensible intuition possible. This unity argument is the essential first-part of both versions of the Deduction.

## 2. A Lingering Concern

The A and B-Deduction each begin by establishing a necessary role for the categories in unifying our sensible intuitions. This is a strong result. If we are given objects through intuition, and intuition requires categories to do so, then the categories must be objectively valid. As we just saw, Kant celebrates this result in §20 of the B-Deduction. He does the same in the A-Deduction, concluding the unity argument there by stating that the categories ‘are therefore also fundamental concepts for thinking objects in general for the appearances, and they therefore have a priori objective validity, which was just what we really wanted to know.’ (A111)

Both declarations are surprising, for they seem to complete the task of the Deduction too soon, with many dense pages still to come. Instead, in both the A and B-Deductions, Kant proceeds to raise a concern about the possibility of this result.<sup>5</sup> In each case, the concern involves the relation between our cognitive faculties. Given their seeming independence, how can categories of understanding provide unity to intuitions given separately—and, often, empirically—through sensibility?

In the A-Deduction, Kant raises this concern in part four of section two. Immediately after concluding that the categories have objective validity, he raises an issue for this result, writing:

However, the possibility, indeed even the necessity of these categories rests on the *relation that the entire sensibility*, and with it also all possible appearances, *have to the original apperception*, in which everything is necessarily in agreement with the conditions of the thorough-going unity of self-consciousness... (A111, my emphasis).

The lingering concern, for Kant, is how the categories are possible as functions bringing intellectual unity to sensible intuitions. In order for the categories to carry out their task, the faculties of sensibility (as source of intuited content) and understanding (as source of apperceptive unity) must somehow be operating together. Absent the proper coordination of these faculties, Kant

goes on to note, our perceptions ‘would consequently be without an object, and would be nothing but a blind play of representations, i.e., less than a dream.’ (A112)

It is quite reasonable to raise this concern about the relationship between sensibility and understanding, for, up to this point, Kant has emphasized their independence. Through sensibility, we passively intuit spatio-temporally structured objects. Through understanding, we actively employ the categories in thinking of objects. Sensible intuition and intellectual thought seem independent, and it is unclear why (or how) the rules governing the latter should influence the former. Thus, even if we accept Kant’s core argument that only the categories can provide the required unity of intuition, we might despair at this result, thinking that it demands something impossible: content given through the senses, but with an intellectual structure.

In the passages following the unity argument, Kant repeatedly expresses this concern. He challenges the reader to explain the affinity of a sensibly given manifold to stand under laws of understanding (A113). Likewise, he ends the first part of the A-Deduction by again acknowledging the implausible relationship between sensibility and understanding that is implied by his core argument. As he puts it: ‘That nature [the law-governed sum of sensible appearances] should direct itself according to our subjective ground of apperception, indeed in regard to its lawfulness even depend on this, may well sound quite contradictory and strange.’ (A114)

This sets up the task of the second part of the A-Deduction (section three). Kant must show us how it is possible for sensible unity to be derived from intellectual categories. If successful, he will have allayed our resistance to accepting his unity argument. That the task of the second part is to explain how this connection between sensibility and understanding is possible is indicated in its concluding sentence. There Kant writes:

But we did not have to accomplish more in the Transcendental Deduction of the categories than to *make comprehensible this relation of the understanding to sensibility and by means of the latter to all objects of experience, hence to make comprehensible the objective validity of its pure a priori concepts*, and thereby determine their origin and truth. (A128, my emphasis)

In the B-Deduction, Kant raises the same concern at the midpoint, §21. After proclaiming the success of his unity argument, he states that only ‘the beginning of a Deduction of the pure concepts of the understanding has been made’ (B144). His account of why the earlier argument is incomplete has drawn enormous scrutiny in the secondary literature, which I discuss further in section 8. What is already clear, however, is that the passage closely resembles the concern raised at the midpoint of the A-Deduction.

First, notice that the concern raised in §21 again involves the seeming independence of our cognitive faculties. As Kant notes, referring to the just-completed unity argument, ‘since the categories arise independently from sensibility merely in the understanding, I must abstract from the way in which the manifold for an empirical intuition is given’ (B144). But how is it possible for intuitions to be given with categorical unity? To address this concern, the second part of the Deduction must show how our faculties are connected in the required way. As he states: ‘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 previous §20’ (B144-5)

As in the A-Deduction, Kant sees the second part of B as being explanatory in character—an answer to a ‘how possible’ question. He introduces its task as involving the ‘*explanation* of its [the category’s] a priori validity in regard to all objects of our senses’ (B145, my emphasis) Likewise, in §26 he sets up the argument as follows: ‘Now the *possibility* of cognizing a priori through categories whatever objects may come before our senses ... *is to be explained*’ (B159,

emphasis altered) He then continues: ‘For if the categories did not serve in this way, it would not become clear *why* everything that may ever come before our senses must stand under the laws that arise a priori from the understanding alone.’ (B160, my emphasis) In this respect, the second part of the B-Deduction shares the explanatory role of its counterpart in A.

If these parallels between the two Deductions hold, then a common structure for the argument emerges. It begins with a unity argument (section two of the A-Deduction, §§15-20 of B). Here, Kant secures the validity of the categories by establishing them as the required source of intuitional unity. However, even if we accept this argument, we might worry that it demands something impossible. Sensibility and understanding, after all, seem to operate independently of one another. How can an intuition be given independently of understanding, while still having a unity that comes from understanding?

As I go on to argue, these mid-point concerns are not meant to undermine the result of the first part of the Deduction. The worry is not that the initial unity argument might be mistaken in its result. Rather, it is the very success of the argument that generates scepticism. Even if we accept that the categories must be successfully unifying our sensible intuitions, we might struggle to see how this result is possible: how intuitions can be given with categorical unity, but through the separate faculty of sensibility. Absent some explanation of this result, we are left trapped in a state of sceptical bafflement: believing that something must be true, but unable to see how it is possible.<sup>6</sup>

### 3. Completing the A-Deduction

The mid-point worry discussed above sets up Kant's task for the second part of the A-Deduction. There, in section three, Kant defends the connection between sensibility and understanding, as a way of addressing the 'how possible' worry raised against the earlier unity argument. It is crucial to see, however, that Kant adopts an *indirect* approach here. Rather than directly explaining the connection between these faculties, he instead attempts to undermine our commitment to their independence. In keeping with this approach, section three consists of two arguments: one from above (starting from pure apperception), the other from below (from appearances). In both cases, the goal is to establish a dependency between sensibility and understanding. So, Kant concludes the argument from above by stating 'that appearances have a necessary relation to the understanding.' He immediately adds: 'Now we will set the necessary connection of the understanding with the appearances by means of the categories before our eyes by beginning from beneath' (A119).

The argument from above begins with understanding. Considered as an independent faculty, it is nothing but pure apperception. As we have seen, apperception is an essential source of the unity of cognition. It is not, however, a self-sufficient source of cognition. As Kant notes, 'this synthetic unity [of apperception], however, presupposes a synthesis, or includes it' (A118). His point is that apperception by itself would be cognitively empty. To fulfil its cognitive function, a manifold of content must be given to it. For this reason, the understanding cannot function as an independent faculty.

In the same manner, the argument from below entertains the possibility of an independent sensibility. We receive appearances through this faculty, and we achieve cognition through their

association. Doing so, however, presupposes that these appearances are *capable* of being associated—that they have a systematic, rule-governed affinity to one another. This affinity, Kant claims, can come only from understanding:

The objective unity of all (empirical) consciousness in one consciousness (of original apperception) is thus the necessary condition even of all possible perception, and the affinity of all appearances (near or remote) is a necessary consequence of a synthesis in the imagination that is grounded a priori on rules. (A123)

Thus, sensibility, like understanding previously, depends on the other faculty for its successfully functioning.

Together, the arguments from above and below aim to challenge our commitment to the independence of our cognitive faculties. Starting from the activity of either faculty, we are led to see a necessary role for the other. Recall that it was this commitment to independence that spurred the ‘how possible’ concern with the result of the unity argument. Kant thus believes that undermining this commitment is sufficient to complete the A-Deduction.

## 4. The Apostasy of Schultz

Kant feared that readers would find the close connection he was asserting between sensibility and understanding baffling. He was right to be afraid, although this was not immediately evident. To Kant’s disappointment, early reviews of the *Critique* missed the importance of the Deduction—if they mentioned it at all.<sup>7</sup> In 1785, however, the *Allgemeine Literatur-Zeitung* published an anonymous review of Ulrich’s *Institutiones Logicae et Metaphysicae*, a metaphysical textbook. The review, while sympathetic to Kant, endorsed some of Ulrich’s doubts concerning the *Critique*. It concluded by raising the very concern Kant had sought to ward off in the second part of the A-Deduction. That is, the review questioned whether Kant had adequately explained the

connection between our faculties. Although published anonymously, Kant knew the author was Johann Schultz, one of his most important allies—and the person Kant later identified as his best interpreter (CORR, 12:367-8).<sup>8</sup> Kant had to take criticism from such close quarters seriously.

In fact, Schultz was deepening the worry that Kant had raised. Rather than simply questioning our ability to comprehend the connection between sensibility and understanding, Schultz felt compelled by his incomprehension to suggest an alternative account of their coordination:

Suppose that appearances were in fact a disorderly mass, a mere accumulation of *simultaneous* and *successive* events, that appear to us as regular only because their existence in accord with the relations of space and time, has been *preestablished* through the will of the creator in a most wise way so that certain appearances ... are always followed by certain other ones in the most orderly fashion, without there being the least *real* connection between them. If that were the case, then the categories of *causality* and *reciprocity* would not be at all applicable to the appearances of nature. (Sassen 2000, 214)

Schultz proposes that an external factor might be coordinating sensibility and understanding.

What is given in sensibility, he argues, might have an order and unity of its own, an order that, by the will of God, matches the order thought through the categories. This alternative explanation would be devastating for Kant's system, for it would imply that the categories have no real connection to the sensible world.<sup>9</sup>

It would be a mistake, however, to suggest that Schultz first made Kant aware of this threat. In the early 1770s, before writing the *Critique*, Kant was already aware of this option. In a note from this period, he writes:

But that we can, from within ourselves, validly connect properties and predicates with the represented objects, although no experience has shown them to us as so connected, is difficult to understand. To say that a higher power has already wisely put such concepts and principles in us is to run all philosophy into the ground. (NF, R4473, 17:564)

Kant attributed similar ideas to Crusius (NF, R4473, 17:564) and Leibniz (CORR, 11:52). The significance of Schultz's proposal was thus due not to its novelty, but to the willingness of this

sympathetic Kantian to entertain such an un-Kantian solution. Kant saw that he needed to address the problem, and he declared his intention to do so in a long footnote in the *Metaphysical Foundations of Natural Science*, published the following year. There he refers to Schultz's review, noting that:

I shall take up the next opportunity to make up for this deficiency ... so that the perceptive reviewer may not be left with the necessity, certainly unwelcome even to himself, of taking refuge in a preestablished harmony to explain the surprising agreement of appearances with the laws of the understanding, despite their having entirely different sources from the former. (MFNS, 4:476)

By 'next opportunity', Kant surely meant the soon-to-appear second edition of the *Critique*.

In the meantime, Kant, in the remainder of the footnote, engages in damage control, distinguishing two tasks of the Deduction. He concedes the obscurity of the A-Deduction, but maintains that the doubts raised by Schultz do not affect its main point. He writes:

For if we can prove *that* the categories which reason must use in all its cognition can have no other use at all, except solely in relation to objects of possible experience (insofar as they simply make possible the form of thought in such experience), then, although the answer to the question *how* the categories make such experience possible is important enough for *completing* the Deduction where possible, with respect to the principal end of the system, namely the determination of the limits of pure reason, it is in no way *compulsory*, but merely *meritorious*. (MFNS, 4:474)<sup>10</sup>

This neatly matches the structure I identified in the A-Deduction: first the unity argument showing *that* the categories are essential (as 'the form of thought in ... experience'); then, when a concern is raised, attempting to show *how it is possible* for the categories can play this role, given the apparent independence of sensibility and understanding. The note also specifies where the A-Deduction was inadequate: in the concluding *how-possible* task. It was the inadequacy of this explanation that led Schultz, in desperation, to posit a preestablished harmony to address the otherwise inexplicable coordination between sensibility and understanding.<sup>11</sup>

Why did the second part of the A-Deduction fail to forestall Schultz's doubts? The problem, I believe, lies in its indirect approach. Kant never directly explains how intellectual categories can be at work in sensible intuition. Instead, he proceeds obliquely, seeking to undermine commitments to the independence of our faculties that might leave us baffled at the result of the initial unity argument. While we can see how this critique of opposing commitments could supplement the unity argument, it is surely less satisfying than a direct explanation of the connection between our faculties.<sup>12</sup> Clearly, the account failed to address some readers' concerns.

The footnote in *Metaphysical Foundations* shows that Kant took Schultz's criticism seriously. It connects Schultz's doubts to Kant's own concern about the connection between sensibility and understanding, and it suggests that the rewritten B-Deduction will address this problem. But we can learn still more from the note, for Kant also hints at the form of the new version:

The latter problem, although without it the structure still stands firm, has great importance nonetheless, 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). (MFNS, 4:475-6)

Kant provides no further details, but the new explanation will evidently appeal to the nature of judgment. In the next section, I use this clue in accounting for how the B-Deduction improves upon the original.<sup>13</sup>

## 5. The New B-Deduction

As we saw, the first part of the B-Deduction presents an argument for the validity of the categories that is more general in scope than its counterpart in A. Whereas the original argument focused specifically on the temporal unity of inner sense, arguing that the categories must guide

their synthesis, Kant now makes the broader claim that *all* combination is produced by the categories. Much has been made of this shift. Although the threefold synthesis does not disappear entirely—the synthesis of apprehension reappears in §26 (B160)—it plays a less prominent role in the new defence of the categories.

As Kant had promised, a key feature of the new, more general unity argument is his appeal to the nature of judgment, starting in §19. For Kant, the functions of intellectual judgment are different ways of unifying any manifold of content. From this very general claim, Kant infers the specific role of the categories in unifying the sensible manifold of a sensible intuition:

Therefore all manifold, insofar as it is given in one empirical intuition, is *determined* in regard to one of the logical functions for judgment, by means of which, namely, it is brought to a consciousness in general. But now 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 (§13). (B143)

This is a simple inference from the more general claim established in the previous subsections. When logical forms of judgment determine a *sensible* manifold, we call these forms categories. In this way Kant completes the argument for the validity of the categories.

Like its predecessor, the unity argument of the B-Deduction allows Kant to establish the categories as making sensible intuition possible. It is quite significant, however, that the new argument achieves this result through a more general appeal to judgment, where judgment is responsible for the unity of *any* manifold, whatever its source. This shift is crucial, for, as we will see, the more general unity principle is now relevant to the task of the second part of the Deduction: explaining how the required connection between sensibility and understanding is possible. For if Kant can show that our forms of sensibility themselves contain manifolds that must be unified, then the claim that *all* combination has its source in understanding will suffice to connect these

faculties. Indeed, this is precisely how the final argument works. It is made possible, however, by the more general formulation of the initial unity argument.

In the footnote from *Metaphysical Foundations*, Kant hinted that the new Deduction will involve an inference from the definition of judgment. We can now understand what Kant means by this clue. The appeal to the nature of judgment allows Kant to shift to a more general claim about the unifying role of understanding. It allows him to preserve what is essential in the unity argument that begins the Deduction, while making possible a better explanation of the relationship between sensibility and understanding in the concluding part. It is thus crucial to understanding how the new Deduction improves upon the original.

## 6. Completing the B-Deduction

I maintain that the second part of the B-Deduction shares the task of the second part of A. In the original, Kant sought to address the reader's potential doubt about the connection between sensibility and understanding. For those who struggled to see how intellectual categories could possibly be the source of intuitional unity—even if they are convinced of the need for this categorical role—Kant provided arguments from above and below designed to undermine their confidence in the independence of these faculties. This indirect strategy was not entirely successful, as shown by Schultz's heretical doubts. Unable to comprehend this connection, Schultz took refuge in a preestablished harmony between these faculties. Now, in the concluding portion of the B-Deduction, Kant offers a better, more direct account of the connection between our faculties. Here, primarily in §26, he appeals to 'the way in which the empirical intuition is given in sensibility' (B144) in order to explain how the categories can be the source of intuitional unity, as the

earlier unity argument demands. The resulting discussion will be Kant's long-awaited direct account: his 'explanation of [the category's] a priori validity in regard to all objects of our senses' (B145).

The account in §26 starts from the formal character of our sensibility. (This is the sense in which the second part lifts the abstraction on how intuition is given in sensibility. Kant does not devote much attention to the specifically spatiotemporal quality of our sensibility. Instead, what matters most for him is its *formal* character.) Anything that serves as a form of sensibility, providing structure to all sensible intuitions, must itself be a pure intuition. As Kant notes, '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' (B160). Kant's point is that to experience something spatially, for example, is to perceive it in relation to other spatial objects, situated within a single, unified framework of possible spaces. To serve as forms of sensibility, space and time must each be a unified representation of a manifold—that is, an intuition. They are thus subject to the general principle, established earlier, that all represented unity depends on the categories.<sup>14</sup>

In the first part of the B-Deduction, Kant employed a general principle—that all representational unity has its source in functions of judgment via the understanding—to establish that every sensible intuition must be unified by the categories (B143). Now he appeals to the same general principle to establish that our forms of intuition must also be unified through a categorical synthesis.<sup>15</sup> But there is an important difference between these two cases. In the first instance, it might seem mysterious how intellectual categories could already be at work in the reception of empirical intuitions through the separate faculty of sensibility. In the latter case, however, there

is no such mystery. For as Kant repeatedly emphasizes in §26, space and time are *a priori* forms of intuition, which makes them available to the understanding *prior* to any particular experience. This removes one crucial obstacle to comprehending how it is possible for the categories to supply the unity of our pure intuitions of space and time.<sup>16</sup>

To be sure, other obstacles remain. Colin McLear has challenged this conceptualist approach to reading Kant, arguing that the unity of space and time cannot come from the understanding (McLear 2015). The reason is that space and time are infinite given wholes, where the unity precedes the parts. And the understanding, because it proceeds in a discursive manner, could not produce this infinite unified whole. As McLear explains: ‘Kant’s point in the third and fourth arguments of the Metaphysical Exposition is that no finite intellect could grasp the extent and nature of space and time as infinite wholes via a movement from part to whole.’ (2015, 91)

The problem with McLear’s challenge, however, is that it proves too much. Consider Kant’s favourite example of an act of synthesis: drawing a line in thought (A102, A162-3/B203-4, etc.) From the context, it is clear that this synthesis is an act of the understanding, governed by the concept of magnitude. And the line that results from this synthesis must contain an infinite number of points, for the success of geometry depends on its infinite divisibility. If McLear is correct, however, the understanding could never complete the synthesis of such a line, since, like space, it is also an infinite given magnitude (in density, if not always in scope), one that could never be produced by the discursive understanding. That is, McLear’s challenge would, if correct, render geometry impossible on Kant’s account.

McLear tries to ward off this objection, writing:

The primacy of our aesthetic representation of space is, however, compatible with holding that we do in fact have a conceptual grasp of individual spaces (e.g. in analytic geometry). Kant's main point is that our grasp of geometric space, which can involve the arbitrary addition or subtraction of spatial magnitudes, is parasitic upon a non-conceptual grasp of a single unified and all-encompassing space in which such subtraction or addition takes place. (87, fn. 20)

Although McLear asserts that his reading is compatible with conceptually grasping geometric spaces, he does not say how it is compatible. And it is hard to see how it could be compatible, since the reason he gives for our being unable to conceptualize space as a whole—that 'grasping an infinite set of marks ... would be impossible for any finite being' (87)—would also serve as a reason for being unable to conceptually grasp a line made up of infinite parts (or, indeed, any geometric object). Given the importance of geometry to Kant's account of sensibility, this indicates that something is mistaken in McLear's argument.<sup>17</sup>

What my response does not yet show is where the mistake lies. McLear is certainly correct in emphasizing Kant's distinction between intuitive and conceptual unities, so something needs to be said about how the understanding, normally associated with the latter, can also be responsible for the former. Here we can turn to three recent responses to McLear. Thomas Land argues that, although the understanding is paradigmatically expressed in discursive, conceptual thought, it also has a non-discursive function in supplying unity to intuitions (Land 2014). Jessica Williams challenges McLear's 'assumption that all synthesis has a part-whole priority', arguing that 'there is a holistic dimension to all acts of synthesis that stems directly from the original synthetic unity of apperception' (Williams 2018, 74-5). Likewise, Andrew Werner is developing a defence of the non-discursive functioning of the understanding by turning to the Dialectic, focusing on the a priori unity of cognition in the ideas of pure reason (Werner 2018).

In the work cited above, we have a promising account of how, contra McLear, the understanding can supply intuitional unity—including the unity of space and time, which I see Kant arguing for in §26 of the B-Deduction. There, the a priori connection between the categories and our forms of intuition is the key to explaining how the unity of all empirical intuitions can derive from the categories. The forms of sensibility are categorically unified by understanding prior to experience. Since everything we perceive is given through these forms, our empirical intuitions inherit this categorical unity. By way of illustrating this inheritance of unity, Kant notes that our empirical intuition of a house involves the unity of space as the outer form of sensibility. He then adds: ‘This very same synthetic unity, however, if I abstract from the form of space, has its seat in the understanding’ (B162). The categories have emerged as the original source of the unity of space (and time), and consequently there is no longer any difficulty in grasping how what we intuit through these forms of sensibility can be given with categorical unity.<sup>18</sup>

## 7. Saving Schultz: How the B–Deduction is Better

If, as the story goes, Kant revised the *Critique* to restore his poor servant Lampe’s faith in God, then the new Deduction was surely written to restore dear Schultz’s faith in Kant. Since Schultz was not convinced by the original, indirect attempt to explain the connection between sensibility and understanding, Kant sought to remedy this in the new version. He now appeals to the a priori forms of space and time to explain how a connection is possible between sensible intuition and categorical thought. As *a priori* intuitions, these forms can and must be unified by the categories. As *forms* of intuition, they bring this categorical unity to everything perceived through them.

Through this new, more direct account, Kant believes he has successfully addressed Schultz's concern. This is evident in the concluding §27. There, employing biological metaphors, Kant distinguishes his explanation of the relationship between sensibility and understanding—an 'epigenesis of pure reason' in which the categories make sensible experience possible—from a supposed alternative:

If someone still wanted to propose a middle way..., namely, that the categories ... were rather subjective predispositions for thinking, implanted in us along with our existence by our author in such a way that their use would agree exactly with the laws of nature along which experience runs (a kind of *preformation-system* of pure reason), then ... this would be decisive against the supposed middle way: that in such a case the categories would lack the necessity that is essential to their concept.... I would not be able to say that the effect is combined with the cause in the object (i.e., necessarily), but only that I am so constituted that I cannot think of this representation otherwise than as so connected; which is precisely what the sceptic wishes most (B167-8).

Here Kant contrasts his own account with a 'preformation-system', the biological theory that embryonic structure does not develop, but instead pre-exists, fully formed.<sup>19</sup> The reference to the categories being 'implanted' by 'our author' so as to agree with the course of nature is a clear reference back to Schultz's worry of a preestablished harmony.<sup>20</sup> In a preformation system, there is no genuine connection between sensible intuition and intellectual thought; each has its own unity, and their fit or agreement just happens to be secured by God's design. Schultz took refuge in this scenario out of desperation, due to his inability to comprehend the possibility of a real connection between our faculties. The new explanation in the second part of the B-Deduction addresses his concern, thus removing any bafflement about the objective role of the categories. In this respect, the new Deduction clearly improves upon the original.

In fact, the evidence suggests that Kant remained happy with this way of completing the Deduction. In his later correspondence with J. S. Beck, Kant returns to the same problem: how categories can be valid of objects when objects are given through a separate faculty. In a letter from 20 January 1792, he writes:

But since concepts to which no corresponding objects *could* be given, being therefore entirely objectless, would not even be concepts (they would be thoughts through which I think nothing at all), just for that reason a manifold must be given a priori for those a priori concepts. And because it is given a priori, it must be given in an intuition without any thing as object, that is, given in just the form of intuition, which is just subjective (space and time). (CORR, 11:316)

As in §26, Kant again appeals to the a priori availability of the forms of sensibility to explain how categories achieve objective validity. The key to showing how the categories are valid is their a priori application to the forms of sensibility. Kant's long quest to explain the connection between our cognitive faculties had been achieved to his satisfaction.

## 8. Henrich's Puzzle

The reading I have defended has implications for a number of contemporary debates in Kant scholarship. One of these is Henrich's influential puzzle about the two-step structure of the B-Deduction. Consideration of this topic will also help clarify certain features of my reading.

As noted in section one, both Deductions face a version of Henrich's puzzle, for the first part of each version concludes by asserting the objective validity of the categories based on their role as source of intuitional unity. This leaves it unclear what is left to accomplish in the remainder of each version. To avoid this redundancy, Henrich sees the first step of the B-Deduction as being restricted in the scope of its achievement, falling short of establishing the complete objective validity of the categories. On his version of this scope-based reading, the first step establishes the

validity of the categories ‘only for those intuitions *which already contain unity*’ (Henrich 1969, 645), while the second step extends the validity of the categories to ‘*all objects of our senses*’ (646).<sup>21</sup>

Henry Allison, while accepting the basic parameters of Henrich’s puzzle, challenges his proposed solution. The problem, as Allison notes, is that Kant describes the second step as examining ‘the way in which the empirical intuition is given in sensibility’ (B143). This focus on human sensibility is more naturally understood as imposing rather than lifting a restriction, where this would leave the second step as a ‘trivial inference from genus to species’ (Allison 2004, 161). To get around this problem, Allison offers a different reading of the two parts. He distinguishes them not based on the scope of the representations falling under the categories, but instead on the scope of the cognitive function of the categories. So, the first part is limited to establishing the necessity of the categories in the *thinking* of objects of intuition. The second part then extends the scope of their cognitive function, showing that the categories are also required for the perception of these same objects (162).<sup>22</sup> Allison thus shares Henrich’s assumption that the first part is limited in the scope of its achievement, and that the second part fills this gap. This is why he characterizes the second part as extending to perception, ‘rather than *merely* the thought of objects’ (162, my emphasis).

But Allison’s reading faces its own difficulties, for, on textual grounds, it does not fit well with Kant’s own summary of the first part. In §20, Kant does not limit the role of the categories to the thought of objects. Instead, he concludes that ‘the manifold in a given [*notice: given, not thought*] intuition also necessarily stands under categories’ (B143). That is, the conclusion of the first part already asserts the result that Allison believes is established only by the second.<sup>23</sup>

More recently, Anil Gomes has argued that the first part of the Deduction establishes merely a subjective necessity for the categories, which is then extended to an objective necessity in the second part. That is, '[t]he second step of the B deduction is designed to take Kant from the claim that we must apply the categories to the claim that the categories must apply.' (Gomes 2010, 132)<sup>24</sup> To be clear, I believe Gomes' general understanding of the Deduction is quite plausible, and his reading of the specific argument in §26 closely resembles mine. Nonetheless, I do not believe that his account of the Deduction's two-step structure works. Like Allison, Gomes implausibly minimizes the achievement of the first part in order to secure a useful role for the second. The first part does not assert merely that we are subjectively compelled to use the categories. Rather, it asserts that intuitions (for Kant, the basis of objective experience) fall under the categories. And the argument for this result does not appeal to a subjective necessity for us, but instead focuses on the need for intuitions themselves to have unity. As he already notes in the middle of the first part: 'The synthetic unity of consciousness is therefore an objective condition of all cognition, not merely something I myself need in order to cognize an object but rather something under which every intuition must stand *in order to become an object for me*' (B138, Kant's emphasis). That is, the argument is already grounded on an objective requirement, not a subjective need.<sup>25</sup>

What Gomes' reading shares with those of Henrich, Allison and many others is the assumption that the first part must somehow be limited in the scope of its achievement, and that this is the only way to avoid making the second step redundant. This is the assumption I wish to challenge. The structure of the Deduction that I have outlined above allows for a different solution to Henrich's two-step puzzle. On my reading, the first part reaches the desired conclusion of the

Transcendental Deduction as a whole, and there is no limitation on the scope of its achievement. There are no representations left unaccounted for, as in Henrich. There is no cognitive functioning left to establish, as in Allison. And there is no lack of objective necessity, as in Gomes.

The task of the second part of the Deduction is not to extend the result of the first, for, if we accept its argument, then we have already ruled out there being any intuitive acquaintance with the world absent the categories. The objective validity of the categories is already secured. Instead, the second part is addressed to the reader who accepts that categories must be at work in sensible intuition, but struggles to grasp how this is possible, given the independence of these faculties. The scepticism here is more like bafflement or despair, rather than doubt in the usual sense. It involves thinking that something must be true, while also failing to see how it could possibly be true. The second part of the Deduction is meant to resolve this baffled state, by explaining how it is possible for categories to supply the unity of intuitions given through sensibility. By doing so, it does not extend the result of the first part, but simply restores us safely to it.<sup>26</sup>

One might worry that my account of the two parts of the Deduction does not properly account for the importance of the second part—that it reduces it to a useful, but ultimately supplemental, explanation. In one sense, this is correct. It is possible to accept the objective validity of the categories, based on the argument of the first part, even if we cannot understand how this is possible. Kant, in reviewing the inadequacy of the second part of the original Deduction, compares the situation to Newtonian science. As he puts it: ‘Thus Newton’s system of universal gravitation stands firm, even though it involves the difficulty that one cannot explain how attraction at a distance is possible; but difficulties are not doubts.’ (MFNS, 4:474). Nonetheless, Kant

recognizes that not being able to grasp how the required relationship between our cognitive faculties is possible is a legitimate problem—just as the problem of action at a distance was a legitimate problem for Newton. So, an answer to the how-possible question remains an important part of a complete deduction of the categories, and it is consistent with Kant declaring, at the end of the first part, that only ‘the beginning of a deduction ... has been made’ (B144).<sup>27</sup>

So, although the second step does not extend the scope of the first step’s achievement, it still plays a vital function in the overall argue. It addresses a worry that arises after one has accepted the objective validity of the categories, as established in the first step – a worry that this result, thought it must be true, is inexplicable given the independence of our faculties. The second step, in showing how this result is possible, saves us from the bafflement that plagued Schultz.

## 9. Kant’s Conceptualism

My account also has implications for the current debate over Kant’s conceptualism: the issue of whether Kant believes sensible content can be cognitively (or at least informationally) significant apart from any contribution from the understanding. Here, the question comes down to whether intuitions can be given to us independently of the categories. This turns out to be a difficult interpretive issue, for each side of the debate finds some textual support in the *Critique*.<sup>28</sup>

The common structure worked out above aligns with a conceptualist reading.<sup>29</sup> Categories supply the required unity of intuition, and space and time themselves are categorically structured prior to experience. One way defenders of the non-conceptualist approach resist this reading is by appeal to Kant’s characterization of the goal of the Deduction. The task, he claims, is to establish the categories as ‘the objective ground of the possibility of *experience*’ (A94/B126, their emphasis), not intuition. That is, the categories are not required for having intuitions, but simply for

producing cognitions (experience) from them. So, for example, Lucy Allais maintains of Kant that ‘when he talks about what is necessary for something to be an “object of experience” or to “be an object for me”, he is not talking about what is necessary to intuit an object but about what is necessary for us to be in a position to cognize an object’ (Allais 2015, 263).<sup>30</sup>

While it is true that Kant grounds the categories in their making experience possible, his route for establishing this role involves showing that the categories are needed for *any* sensible intuition of objects. This is why he insists that the categories ‘must be recognized as a priori conditions of the possibility of experiences (*whether of the intuition that is encountered in them, or of the thinking*).’ (A94/B126, my emphasis) Likewise, Kant summarizes the results of the B-Deduction by noting that ‘Consequently all synthesis, *through which even perception itself becomes possible*, stands under the categories’ (B161, my emphasis).

Allais downplays the appeal to perception in the last quotation. Following Tolley (2013), she argues that, by perception, Kant often means a cognitively-sophisticated representational awareness that already includes concepts (Allais 2015, 151). She thus grants that perception might require the categories, while still holding that ‘the syntheses the Deduction is concerned with are primarily something that is done *to* intuition, not something that *produces* intuition.’ (2015, 150)

Although I find this reading of perception implausible, I will not argue the point here. It is quite clear, however, that Kant sees intuition as being produced by a categorical synthesis. In a passage from the A-Deduction that Allais herself quotes (2015, 286), Kant states:

Hence we say that we cognize the object if we have effected synthetic unity in the manifold of intuition. But this is impossible if the intuition could not have been *produced through a function of synthesis* in accordance with a rule that makes the reproduction of the manifold necessary a priori and a concept in which this manifold is united possible. (A105, my emphasis)

On textual grounds, at least, this passage seems to support the conceptualist reading.

We can get clearer on the philosophical stakes of this debate by stepping back to consider the threat that Kant's Deduction is meant to ward off. On Allais' non-conceptualist reading, 'Kant starts the Deduction with the claim that there is a problem seeing how (non-mathematical) a priori concepts can succeed in referring, or relating, to objects.' (2015, 270). The remedy, then, is to show that these objects can be supplied by intuition.

This way of capturing the threat is not wrong, but it is stated too generally. As I have argued above, Kant is addressing a concern about a particular kind of failure of categorical reference. The fear is a failure of fit or affinity between the content supplied by sensibility and the categories thought through the understanding. As Kant states, in one of many passages expressing this concern:

but that they [objects of sensible intuition] must also accord with the conditions that the understanding requires for the synthetic unity of thinking is a conclusion that is not so easily seen. For appearances could after all be so constituted that the understanding would not find them in accord with the conditions of its unity, and everything would then lie in such confusion that, e.g., in the succession of appearances nothing would offer itself that would furnish a rule of synthesis and thus correspond to the concept of cause and effect, so that this concept would therefore be entirely empty, nugatory, and without significance. Appearances would nonetheless offer objects to our intuition, for intuition by no means requires the functions of thinking. (A90-1/B123)

The worry here is how to explain the possibility of an affinity between sensibility and understanding that is required for the categories to play their unifying role. In other words, it is the *fit* between the structural orders of sensibility and understanding that must be accounted for.<sup>31</sup>

Notice, however, that this way of characterizing the threat is a problem for non-conceptualism, for its defining claim is that sensibility is independent of understanding! This makes it very difficult to account for the affinity between these faculties. In the Deduction, Allais states, 'we already have intuitions ... and something further is being done to enable us to think about these

intuitions as presenting [thinkable] objects' (2015, 274). In her view, we are already given objects through intuition; the Deduction then shows that a categorical synthesis must be performed on these intuitions to make them cognizable in thought. But this way of reading the Deduction simply presupposes that what is given in intuition is amenable to the synthesizing activity of the categories. In other words, it begs precisely the question that Kant raises at the midpoint of the Deduction. By contrast, the conceptualist reading of Kant recognizes this concern regarding the fit between our faculties, which is addressed by showing that the categories are already at work in the production of intuitions.<sup>32</sup>

Non-conceptualists believe that the categories cannot play this role—that sensible intuitions must already be given before the categories can act on them. Ironically, Schultz was led to a similar position due to the inadequacy of the original A-Deduction. He recognized, however, that proclaiming the independence of sensibility and understanding was not a stable position, for he saw that some account of their affinity was required. It was the absence of such an account that led him, in desperation, to propose a pre-established harmony between the faculties. Kant intended for the rewritten B-Deduction to assuage Schultz's fears by showing how the categories synthetically unify our a priori forms of sensibility. As a result, all sensible intuitions, at least for us finite rational beings, inherit this categorical structure. If my account of Kant's response to Schultz is correct, this offers further support for the conceptualist reading of the Deduction.<sup>33</sup>

## Conclusion

Kant himself downplayed the significance of the rewritten Deduction, insisting that the two versions differed only in their 'mode of presentation' (Bxxxviii). Ever since, philosophers have

been dedicated to proving him wrong. Although there are certainly important differences between the two Deductions, we have inherited an exaggerated and distorted understanding of them. As I have argued, the changes are best understood by first identifying what the two versions share in common. Specifically, both Deductions share the same basic structure. They begin by revealing an essential role for the categories in supplying the unity of sensible intuition. Then, after acknowledging a concern about the possibility of this role, they explain it by revealing an a priori connection between sensibility and understanding. Given the common structure of the two Deductions, I wish to defend the spirit of Kant's above remark, if not the exact letter.

The B-Deduction retains this basic structure, but it improves upon it in two key ways. In the second part, it offers a more direct explanation of how categories can be at work in intuition, by showing that our forms of sensibility are already categorically structured prior to experience. And this better explanation is made possible by changes to the unity argument in the first part, which is now pitched at a much more general level—applicable both to particular intuitions and the forms of sensibility themselves. Through these changes, Kant provides a more successful account of the affinity between sensible intuitions and intellectual categories.

While the B-Deduction clearly improves upon the original, it is important to note that it does not mark a fundamental shift in Kant's thought. Although the argument is new, its solution to Schultz's problem is in keeping with Kant's general views in the A-edition. This is evident in passages prior to the Deduction that are common to both editions. For example, he already insists that the categories are forms of a unity common to both understanding and sensibility. As he puts it: 'The same function that gives unity to the different representations in a judgment also gives

unity to the mere synthesis of different representations in an intuition, which, expressed generally, is called the pure concept of understanding.’ (A79/B104-5). Later, Kant even notes that the representations of space and time must be unified through a synthesis of their manifold (A99-100).

What this shows is that the pieces of the puzzle were already in place. In the A-Deduction, Kant already had the resources to provide the more direct and convincing account of the B-Deduction. He simply did not come up with it. As Kant concedes, in the quotation that serves as the epigraph for this piece, this failure can be chalked up 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.’ (MFNS, 4:476)<sup>34</sup>

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## Notes

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- 1 I follow the translations in *The Cambridge Edition of the Works of Immanuel Kant*, citing the *Akademie* numbering with these abbreviations: CORR = *Correspondence*; MFNS = *Metaphysical Foundations of Natural Science*; NF = *Notes and Fragments*; OP = *Opus Postumum*. For the *Critique of Pure Reason*, I use the standard A/B numbering.
- 2 While Kant is clear that the categories are functions of intuitional unity, this might seem at odds with his later distinction between mathematical and dynamical categories (A160/B199). There Kant claims that the latter group (including the categories of substance and causality) are not *constitutive* of intuition, but merely *regulative*, in that they determine the connection of intuitions in experience (A180/B222-3). It is a mistake, however, to see Kant’s distinction as limiting the scope of his earlier unity claim. When Kant defends substance and causality in the Analogies, it is difficult to make sense of these arguments without appealing to the idea that individual intuitions require these concepts. After all, the whole point of the second analogy is that we could not have a discrete intuition of an event as taking place at a particular time without appealing to its causal relationship to other events. This feature of the argument affects how we should understand his constitutive/regulative distinction. We can grant that the mathematical categories are more directly involved (as Kant says at A160), in that they are needed for the very composition of this individual intuition. The dynamical categories, by contrast, concern the relationship between intuitions. Kant’s point, however, is that we ultimately cannot make

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sense of an isolated intuition. At a bare minimum, every intuition must be given at a particular point in time, meaning that it must belong within a larger structural order. And a central claim of the Analytic is that this temporal specification (which might have seemed straightforward in the Aesthetic) turns out to rely essentially on the dynamical categories. So, although the dynamical categories function differently, they are still fundamentally involved in determining the unity of an intuition. This is why Kant maintains, in a Reflexionen, that ‘All objects that we are to think must be determined with regard to *all the logical functions of the understanding*’ (NF, R5932, 18:392, my emphasis). On this point, see Allison (2015, 321-22).

- 3 The argument of the A-Deduction takes place in sections two and three. It is preceded by an introductory section one, largely unchanged in B. The argument of the B-Deduction is divided into further subsections (from §15 to §27).
- 4 The same point is made in Mensch (2005).
- 5 This is my characterization of the ‘two-steps-in-one-proof’ puzzle that Henrich (1969) made central to discussions of the Deduction. I address Henrich’s treatment of the problem, along with subsequent scholarship, in section eight.
- 6 Here I am drawing upon the helpful account of Kantian skepticism in Conant (2004). I return to this topic in section eight, as part of my contribution to solving Henrich’s puzzle about the proof-structure of the Deduction.
- 7 These reviews are collected in Landau (1991).
- 8 Schultz’s authorship and Kant’s knowledge of it are confirmed in Hamann’s correspondence with Jacobi and Herder. See Beiser (1987, 205–6).
- 9 Although Schultz employs Leibniz’s language of a ‘pre-established harmony’, his concern here is not simply about the coordination of independent substances. Applied to the Kantian framework, the worry is about the coordination of our faculties of understanding and sensibility. As Schultz repeatedly states, the fear is that ‘the categories [do] not have a necessary relation to appearances’ (Sassen 2000, 214). Moreover, Kant clearly takes Schultz to be questioning the connection between our faculties, as we will see in considering his response.
- 10 As he often does, Kant focuses on the limits of the categories, not their legitimate sphere of activity. But these are two sides of the same coin. What validates the categories (their essential role in experience) is also what

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limits their applicability.

- 11 In presenting Schultz's concern about the Deduction—and Kant's reaction to it—I have focused on Schultz's concern about the relationship between our cognitive faculties. In addition to the passages I have discussed, Schultz also employs Kant's distinction between judgments of experience and perception (from the just-published *Prolegomena*) to present his doubts about the Deduction. This aspect of Schultz's review is very effectively discussed in Pollok (2008, 327 & 335-9).
- 12 Some might wonder how this indirect approach provides *any* sort of explanation. After all, refuting alternatives to X does not show *how* X is possible. I share this concern. Nonetheless, there was a tradition of seeing explanatory value in such arguments. For instance, the criticism of reductio proofs in the *Port-Royal Logic* includes the following qualification:
- It is not that we ought to reject these demonstrations altogether. We can sometimes use them to prove negatives that are properly speaking only corollaries of other propositions that are clear in themselves or previously demonstrated by another way. In that case this kind of demonstration by reduction to absurdity is more like an explanation than a new demonstration. (Arnauld and Nicole 1996, 255)
- Kant cautions against such proofs in philosophy, but grants that they have 'more clarity of representation' (A790/B818). Elsewhere, he writes: 'Whoever finds the direct (demonstrative) mode of proof insufficiently illuminating, can here use the indirect (apagogical) mode.' (OP, 21:604).
- 13 For further discussion of Kant's note in *Metaphysical Foundations*—and its significance for the B-Deduction—see Pollok (2008), Kitcher (2011, 115–60) and Allison (2015, 306–15).
- 14 In the above account of §26, I do not claim to be offering a novel reading of the argument. My understanding of this section of the Deduction is heavily influenced by the account in Longuenesse (1998) and the reading developed jointly by Conant, Haugeland and McDowell, as presented in Haugeland (2017, 341-364). It is also in close agreement with the interpretations in Griffith (2012) and Gomes (2010, 130-132). Regarding Longuenesse, I believe that she is exactly right to see this argument as a 'rereading of the Transcendental Aesthetic' that reveals a previously hidden role for the understanding in bring unity to the forms of space and time (213).

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What I hope to contribute to this reading is a clearer sense of how the argument of §26 relates to the corresponding section of the A-Deduction: both the structural parallels that remain in place; and the improvements spurred by Schultz's doubts.

- 15 This, I claim, is what Kant was referring to in the note to the *Metaphysical Foundations* where he promised that, in the new Deduction, the answer to the how-possible question 'can almost be accomplished through a single inference from the precisely determined definition of a judgment in general' (MFNS, 4:475-6). Having already established, in the first part of the Deduction, that all representational unity has its source in functions of judgment, the argument in §26 can infer from this that the unity of our forms of intuition also comes from understanding. Here, my reading of Kant's promissory note and the subsequent argument of the B-Deduction differs from the interpretation presented in Pollok (2008). Pollok argues that Kant's 'almost single inference' refers to a broad stretch of argument, including §19 and most of §26. I limit the 'almost single inference' to a smaller part of Kant's argument: the inference from a very general unity principle (new to the B-Deduction) to the categories being the source of the unity of our forms of intuition. One advantage of my reading is that it looks more like an 'almost single inference' than Pollok's eight-premise, four-conclusion argument, a difficulty that Pollok himself recognizes (331).
- 16 On the reading of §26 that I am defending, Kant establishes an essential role for the categories in unifying the forms of sensibility. It should be acknowledged, however, that he does not describe this unifying activity in much detail. As a perceptive anonymous reviewer noted, this activity might well look different from the activity of the categories in regular intuitions, given the unique character of space and time as sensible forms. While a more complete account from Kant would certainly be helpful, it is not required here. His task in the second half of the Deduction is simply to remove the worry that the categories could not possibly be the source of the unity of intuitions that are given independently through sensibility. To do so, it is enough for Kant to bring out the *a priori* availability of space and time to the unifying activity of the understanding. A full account of this activity is not needed.
- 17 To be sure, the understanding still depends on sensibility for its grasp of the infinite parts of the line. That is, we cannot acquire this content through concepts alone and must construct the line in intuition. Nonetheless, the success of geometry requires that all of this infinite content be synthesized by the understanding, and this is

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what McLear takes to be impossible. I thank an anonymous reviewer for encouraging me to clarify my view here.

- 18 For reasons of space, I have not discussed the role played by imagination in the Deduction. Briefly, however, I wish to resist the idea that imagination makes an additional contribution to cognition, beyond that of sensibility and understanding. After all, Kant begins the Analytic by declaring that ‘Our cognition arises from *two* fundamental sources in the mind’ (A50/B75), not three. Instead, we should see imagination as a faculty that expresses the successful connection between sensibility and understanding. Kant emphasizes this aspect of imagination in both Deductions. In the B-version, Kant writes: ‘Now that which connects the manifold of sensible intuition is imagination, which depends on understanding for the unity of its intellectual synthesis and on sensibility for the manifoldness of apprehension.’ (B164) Likewise, in the A-Deduction Kant says of imagination: ‘By its means we bring into combination the manifold of intuition on the one side and the condition of the necessary unity of apperception on the other.’ (A124)
- 19 On Kant’s metaphorical employment of these biological concepts, see Baumgarten (1997), Sloan (2002), Zammito (2003) and Mensch (2013).
- 20 Sassen (2000, 34–36) agrees that Kant is addressing Schultz here, but she does not consider how the broader changes in the B-Deduction are designed to address his concerns, and thus she finds the passage inadequate as a response.
- 21 Other scholars have followed Henrich’s scope-based approach, but identify different representation as what is left unaccounted for in the first step. Keller, for example, argues that the second step is needed because the first step has not yet shown the applicability of the categories to our subjective inner states (1998, 91-2).
- 22 Shaddock criticizes features of Allison’s reading, but agrees that the two steps establish distinct cognitive roles for the categories: with the first step showing their necessity for making appearances objects of judgments, and the second step showing their necessity for making appearances objects of intuition. (2014, 52).
- 23 The same objection to Allison’s reading is raised in Pollok (2008, 332 fn. 20).
- 24 A reading similar to that of Gomes can be found in Pippin (1982). Pippin sees the first step as defining the structure of our experience, leaving it to the second step to show that no other unity is possible – that the categories are objective and not merely subjectively ours (182-3).

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- 25 To be sure, the argument of the first step is still subjective in the sense that it appeals to the conditions of being a finite, rational cognizer. (This is evident in the final clause of the above quote: ‘in order to become an object for me’. But this is true of Kant’s project as a whole and cannot be the basis for distinguishing the two steps of the Deduction. To deny this is simply to deny Kant’s idealism altogether.
- 26 As noted above, I am drawing upon the account of Kantian skepticism in Conant (2004). Henrich (1969) criticizes earlier attempts by Adickes and Paton to use a that/how distinction to interpret the two sides of the B-Deduction. But Henrich is considering the ‘distinction between a psychological and an epistemological investigation’ (643), which is altogether different from the that/how distinction I am drawing. Indeed, Henrich is open to the idea that the Deduction offers ‘an explanation of the possibility of their [the categories’] relation to sensibility’ (652), although he does not see this as the specific task of the second part.
- 27 For further evidence that Kant sees answers to how-possible questions as central to the task of deduction, consider the following passage from later in the *Analytic*: ‘For though their [mathematical principles’] correctness and apodeictic certainty do not indeed require to be established, their possibility, as cases of evident a priori knowledge, has to be rendered conceivable, and to be deduced.’ (A149/B189) I thank a reviewer for raising this concern.
- 28 I attempt to reconcile some of these passages in Bauer (2012).
- 29 Following the useful taxonomy in Allais (2015, 149), the view I am defending is ‘moderate conceptualism’. That is, I see Kant as recognizing that there are distinctly sensible aspects of intuition, but still insisting that the categories are essentially involved in forming intuitions. In what follows, I will focus primarily on Allais’s account of Kantian non-conceptualism. Her work provides an especially thorough defence of the position, one that addresses the latest moves in the ongoing debate.
- 30 See also: McLear (2015, 82) and Tolley (2013, 125).
- 31 The end of the above passage is often cited in defense of non-conceptualist readings of Kant, since it claims that intuition does not require thinking—see, for example, Hanna (2008, 45) and Schulting (2016, 238). Griffith, however, offers convincing textual evidence against this reading. Kant’s purpose in this passage is to show why the Deduction of the categories is more challenging than a defense of the forms of sensibility. When we consider this broader context, the last remarks are best understood as Kant floating a possibility that he will go

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on to reject in the Deduction itself. See Griffith (2012, 199-200).

- 32 For an example of a non-conceptualist reading of Kant that is centrally concerned with the problem of affinity, see Hanna (2011). Hanna sees Kant as torn between a non-conceptualist account of intuition and a Deduction that needs conceptualism to succeed. He concludes that we should reject the Deduction as it stands, while recognizing that one could also deny that Kant is a non-conceptualist regarding intuition. My account supports the latter option.
- 33 Non-conceptualists often ask: if conceptualism holds that sensible intuitions must be categorically structured, how can we make sense of what animals do? Kant recognizes that animals have a non-conceptual givenness of particulars, and it seems clear that they can also do something at least analogous to thinking about this sense content (solving problems, recognizing patterns, and so on). I believe Kant's view is that, for animals, the affinity between sensibility and their non-conceptual analogue to understanding is explained by instinct. But, precisely because the affinity between their sensibility and their 'thinking' is secured by irrational instinct rather than rational categories, animals are incapable of knowledge. And, conversely, humans can achieve knowledge precisely because our sensibility has been rationally transformed by the categories. I hope to address this topic in a future work.
- 34 My own investigations have not taken the shortest way to print. I presented earlier versions of my account at the Eastern Study Group of the North American Kant Society (Georgetown, May 2015) and the University of Chicago's Early Modern Workshop (November 2012). I thank the participants of both groups for their helpful feedback. Along the way, several anonymous referees provided valuable comments that greatly improved the paper. Finally, I am especially grateful to the following individuals—both for their detailed feedback on earlier drafts and for many rewarding discussions of Kant and the Deduction: James Conant, Thomas Land, Daniel Smyth, David Svolba and Andrew Werner. Thanks!