

## Kant's Attack on Leibniz's and Locke's Amphibolies

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### 1. Introduction

The Transcendental Analytic of Kant's *Critique of Pure Reason* ends with a little appendix called The Amphiboly of the Concepts of Reflection. It contains a number of important discussions. Why Kant relegated them to an appendix is far from clear.

First, the passage contains the only discussion of numerical identity in the entire first *Critique*. Kant had used the concept earlier a number of times; but he discusses it for the first (and only) time here.<sup>1</sup> In the Table of Categories, numerical identity is not even mentioned—an omission that is quite puzzling when we see Kant's discussion of the concept here.

Second, the passage offers not one but two arguments for the need for sensible intuition—the first such arguments anywhere in the Analytic. Kant has of course asserted this need earlier, many times in fact—but try to find an argument! The arguments that he offers here were not new to him. Indeed, they go back to his earliest philosophical writings. One of the two builds on his discussion of identity.

Third, the passage introduces a new form of transcendental thinking, transcendental reflection.<sup>2</sup> Transcendental reflection, Kant tells us, is one route to synthetic *a priori* knowledge, so it should have been important to him. Yet it had never appeared in his work prior to this Appendix, not under this name

<sup>1</sup> The term “identity of number” is perhaps preferable to Kant's term “numerical identity”—there is only one kind of identity—but I will stick with Kant's term (A263/B319).

<sup>2</sup> There is an interesting terminological issue here. Kemp Smith translates both “*Reflexion*” and “*Überlegung*” as “reflection”, yet the words have different meanings. Kant uses the first in the phrase “Concepts of Reflection”, the second in the name for the new transcendental activity that Kemp Smith labels “Transcendental Reflection”. Pluhar suggests that “deliberation” is a better translation of “*Überlegung*” than “reflection”. He may have a point. However, since Kant parses “*Überlegung*” in Latin as “*reflexio*”, I will stick with Kemp Smith's now standard translation.

anyway—the importance of this qualification will become clear later—and immediately disappeared again.<sup>3</sup> Altogether, a curious little piece of work.

None of these topics is the stuff of an appendix. The passage is curious in other ways, too. The main target of the new argument is Leibniz. But why does Kant launch an attack on Leibniz here at the end of the Analytic when much of the Transcendental Dialectic is a critique of Leibniz (among others, of course)?<sup>4</sup> The Dialectic begins *immediately* after the Amphiboly ends. Further, the actual Appendix is less than six pages long, but the Note to it is more than twice that long. Altogether, a curious little piece of work.

The Appendix has not, to say the least, fired the imagination of Kant’s readers. With the possible exception of the Transcendental Doctrine of Method, no part of the first *Critique* has received less attention. This neglect is not warranted.<sup>5</sup>

## 2. The Attack on Locke and Leibniz

Kant presents the Appendix as an attack on two mistakes, one made by Leibniz and one by Locke, mistakes that are in some ways the opposite of one another. An amphiboly of the concepts of reflection, Kant tells us, is “a confounding of an object of pure understanding with appearance” (A270/B326).<sup>6</sup> This confounding can happen in two ways. One is to take an appearance to be an object solely of the understanding. Here one takes something that has in fact been delivered through the senses (or sensible imagination, presumably) to be something known purely by thinking about it. This is the form Leibniz’s amphiboly took. The other is to take something acquired nonsensibly (e.g., *a priori* concepts such as the categories) to be a deliverance of the senses. This is the route Locke took. “In a word, Leibniz *intellectualised* appearances, just as Locke ... *sensualised* all concepts of the understanding, i.e., interpreted them as nothing more than empirical or abstracted concepts” (A271/B327).

<sup>3</sup> Almost disappears. The concepts of reflection (the concepts used in transcendental reflection) are mentioned briefly once in the opening paragraphs of the Dialectic immediately following and once more in the *Prolegomena* (4:326).

<sup>4</sup> Perhaps the reason Kant puts the material of the Amphiboly at the end of the Analytic rather than somewhere in the Dialectic is that the Dialectic is concerned with rationalism on “God, freedom, and immortality” (Bxxx), whereas the appendix before us is about knowledge.

<sup>5</sup> Norman Kemp Smith, *Commentary to Kant’s “Critique of Pure Reason”* (London: Macmillan & Co. Ltd, 1923); G.H.R. Parkinson, “Kant as a Critic of Leibniz: The Amphiboly of Concepts of Reflection”, *Revue Internationale de Philosophie* 35 (1981); R. Butts (ed.), *Kant’s Philosophy of Physical Science* (Boston: Reidel, 1986); Derk Pereboom, “Kant’s Amphiboly”, *Archiv für Geschichte de Philosophie* 73 (1991), 50-70; K. Ameriks, “The Critique of Metaphysics: Kant and Traditional Ontology”, in P. Guyer (ed.), *The Cambridge Companion to Kant* (Cambridge: Cambridge University Press, 1992), 249-79; and J. Wuerth, “The First Paralogism, its Origin, and its Evolution: Kant on How the Soul Both Is and Is Not a Substance” (*Kant and Personhood*, (xxx, 2010)ch.###). J. Van Cleve, *Problems from Kant* (New York: Oxford University Press, 1999) and R. Langton, *Kantian Humility: Our Ignorance of Things in Themselves* (Oxford: Oxford University Press, 2001) discuss some central issues.

<sup>6</sup> Quotes from Kant’s first *Critique* are from *Immanuel Kant’s Critique of Pure Reason*, tr. Norman Kemp Smith (London: Macmillan Co. Ltd., 1963 [1927]).

Were Leibniz right, Kant thought, all genuine knowledge would be purely conceptual, a product of acts of the understanding; sensible experience would have no essential role to play in determining the truth or falsity of beliefs. For Kant, this would be wrong in itself. Even worse, however, if all knowledge were conceptual, Kant believed, we would or at least could have knowledge of things as they are in themselves. Why? Because with objects of understanding, their nature (as they are, not just as they appear) would be carried by their concepts. What concepts carry is accessible to us, so if we know what we know via concepts, we would know these objects as they are. Kant, of course, had to deny that we have any such knowledge.

Locke's amphiboly makes the opposite mistake. As Kant read him, Locke held to the old Aristotelian idea that everything we know comes to us via the senses. This would be a serious mistake because it would undermine the claims of propositions in, for example, mathematics and physics to be necessary and universal, radically psychologizing them. Kant took such necessity and universality to be self-evident in the case of mathematics and required of anything with a claim to be a science (B20-1), so he could not accept Locke's empiricism any more than he could accept Leibniz's rationalism.

For Kant, any amphiboly is serious and Locke's psychologism would have struck him as utterly mistaken. If we are to judge by what follows, however, Leibniz's amphiboly concerned him a good deal more than Locke's. Locke is not mentioned again.

### **3. Transcendental Reflection and Its Concepts**

How does Kant set out to refute these two amphibolies? He turns to what he calls transcendental reflection, "the consciousness of the relationship of representations to our different sources of knowledge" (A260/B316).<sup>7</sup> It uses what Kant calls the concepts of reflection to achieve this. The different sources of knowledge that he has in mind are sensibility and understanding, and the task of transcendental reflection is to determine the source of a given representation.

Kant's arguments against Leibniz and Locke fall out of this investigation. Leibniz mistook objects belonging to sensibility for objects requiring only understanding (i.e., thinking) to be known. As Kant put it, Leibniz wrongly supposes that if a distinction is not found in the concept of a thing, then it is not to be found in the thing (A281/B337):

Because in the mere concept of a thing in general we abstract from the many necessary conditions of its intuition, the conditions from which we have abstracted are, with strange presumption, treated as not being there at all, and nothing is allowed to the thing beyond what is contained in its concept.

On the other hand, Locke took objects requiring acts of understanding to belong solely to sensibility.

The way to determine from which source of knowledge a represented object comes is to study the kinds of relations it enters into with other represented objects. Kant says that four kinds of relationship are

<sup>7</sup> He actually refers to reflection without qualification, but the context makes it clear that he means transcendental reflection.

germane: relations of identity<sup>8</sup> and difference, agreement and opposition, inner and outer, and matter and form. These are the concepts of reflection. Relations of identity and difference concern the conditions for multiple representations representing one and the same object—numerical identity of object across representations. Relations of agreement and opposition are about the very different ways different kinds of object can be in opposition to other objects. The distinction between inner and outer concerns some complex issues in Leibnizian metaphysics. The general issue behind the distinction is a particular form of the distinction between intrinsic and extrinsic properties. Finally, by the terms matter and form Kant had something broader in mind than what would occur to us now, something very much like the Aristotelian distinction between utterly formless stuff and the forms it takes when made into objects.

Of the four pairs, identity and difference and agreement and opposition are the most important for our purposes here. The issues of enduring interest for Kant's project mentioned at the beginning all arise in the course of his treatment of these two pairs.

#### 4. Identity and Difference

In connection with identity and difference, the question that interests Kant most is the relation of identity of qualities (i.e., indiscernibility) to numerical identity (i.e., being one and the same thing; *numerica identitas*, as he puts it) (A263/B319). His main target is the principle of the identity of indiscernibles.

Contrary to Leibniz's principle, Kant urges, the objects of two representations can be entirely indiscernible, that is to say, qualitatively indistinguishable, yet be different objects:

the mere fact that they [the two represented objects] have been intuited simultaneously in different spatial positions is sufficient justification for holding them to be numerically different. (A264/B320)

He gives the now famous example of drops of rain: two drops of rain are clearly *two* drops. Yet they can be indiscernible. Under what condition? When one description is all we need to describe both fully. Since what makes a drop of water the thing it is does not change when it changes location, location is not part of what it is (cf. A272/B328). Now, if the two drops are descriptively indiscernible, the only way we could be aware of their numerical difference, urges Kant, is by sensibly intuiting them. QED.

As Kant saw it, indiscernibility entails identity only with respect to objects *of the understanding*; Leibniz's mistake was to hold that the same is true of objects of the senses. To misapply the principle in this way is to commit an amphiboly, confusing the relations distinctive to objects of the understanding with the relations distinctive to objects known via the senses.

<sup>8</sup> Kemp Smith translates Kant's word "*Einerleiheit*" as "identity", Pluhar as "sameness". Strictly speaking, Pluhar probably made the better choice. Since, however, Kant clearly has numerical identity in mind—four lines down he actually speaks of *numerica identitas* (A263/B319)—I will follow Kemp Smith.

## 5. Agreement and Opposition

The distinction between understanding (thinking) and sensibility is central to Kant's analysis. What difference, exactly, is marked by this distinction? The next pair of concepts, agreement and opposition, helps clarify this difference. Relations of agreement and opposition are about the ways in which represented objects can be in opposition. The relevant relationships fall into two broad kinds. I will call them semantic and nonsemantic.

The relations of opposition between objects such as numbers and propositions are semantic: relationships of implication, semantic inclusion, disjunction, contradiction, etc. How Kant saw such relationships is none too clear, being enmeshed in Leibniz's principle that, as Kant put it, "realities ... never logically conflict" (A273/B329). However, the contrast Kant wanted to make is clear, so this unclarity about what I am calling semantic relationships may not matter much.

As well as semantic properties, many objects also have (or are represented as having) temporal properties and some have both spatial and temporal ones. This opens the door to additional, nonsemantic forms of opposition. Consider, for example, the way one force can counteract another and the way feelings of pain "counterbalance" feelings of pleasure. In Kant's words (A265/B321),

When such realities are combined in the same subject, one may destroy the consequences of another, as in the case of two moving forces in the same straight line, in so far as they either attract or impel a point in opposite directions, or again in the case of a pleasure counterbalancing pain.

The relationships resulting from spatial properties such as mass, energy, size, color, texture, and so on that open the way to these forms of opposition are nonsemantic.

Kant's anti-Leibnizian conclusion follows immediately. We could be aware of nonsemantic forms of opposition only if we have sensible awareness of objects. We are aware of these forms of opposition. Therefore, ... QED.<sup>9</sup> While we can know objects of the understanding purely by their semantic properties, so by merely thinking about them, we need sensibility to know objects that enter into nonsemantic relationships.

Note two things. First, Kant has not proved his claim about the need for "sensible intuition" generally, only for the cases he discusses. Second, his earlier point about identity could now be put this way: for some objects, nonsemantic properties play a crucial role in numerical identity and difference.

The argument for the necessity of sensible intuition implies in turn, Kant thought, that we are not aware of anything for which we require sensible intuition as it is in itself. Sensible intuition tells us merely how things appear to us, not how they are. For any object for which we require sensible intuition, then, we are not aware of that object as it is in itself. Once more, QED.

<sup>9</sup> At any rate, that is Kant's point against Leibniz: to be aware of such oppositions, we need sensible input. His point against Locke would be the obverse: to experience oppositions, especially semantic oppositions, we need representations from the understanding. The two amphibolies share the mistake of thinking that one side can do the job alone.

## 6. Inner and Outer, Form and Matter

We turn now to the remaining two pairs of Concepts of Reflection, inner/outer and form/matter. The issues they raise are less important to Kant's overall project than those raised by the first two pairs and Kant did not offer any generally interesting arguments in connection with them. So we will be brief.<sup>10</sup>

Figuring out exactly what Kant is saying in his discussion of the inner and outer is not easy. The general target is clear. It is Leibniz's argument that everything consists of monads. But everything else is pretty murky, even how Kant saw Leibniz's opening moves. According to Kant (A283/B339), Leibniz argued that for there to be relations, there must be things related to one another. If so, there must be things whose nature consists in nonrelational properties. But even composition or structure is relational. Consequently, there must be things that are non-composite (i.e., simple)—monads. So far, so good. But how, in Kant's view, did these moves lead Leibniz to commit an amphiboly?

They did not. As Kant saw it, Leibniz arrived at his views about monads because the move he starts with has *already committed* an amphiboly. Leibniz (chez Kant, of course) argued like this. Anything known by the senses is not as it appears. What really exists is what can be known through the analysis of "mere concepts" (A283/B339)—objects of the understanding. But objects of the understanding have only inner (i.e., nonrelational) properties (i.e., are monads).

What was supposed to have led Leibniz to conclude that objects of understanding must be conceived as having *nothing but* nonrelational properties is entirely unclear. *A fortiori* for being simple, Kant's diagnosis does not help much. Says Kant, "Leibniz, regarding substances as noumena, took away from them, *by the manner in which he conceived them*, whatever might signify outer relation ... and so made them all ... simple subjects ... in a word, MONADS" (A266/B321-322, my italics). According to Kant, Leibniz arrived at this conclusion because he held that "if I abstract from all conditions of intuition ..., I can abstract from all extrinsic relations, and there must still be left a concept of something which signifies no relations, but intrinsic determinations only" (A283/B339). But the argument for this view is not clear. Maybe, jumping from the last to the second-last passage above, it is that for objects as objects of understanding, all we are aware of is "either a *thinking* or something analogous to thinking" (A266/B321). That is, Leibniz conceived of all that existed as being like minds as he saw minds: non-composite and so non-relational. If Leibniz had merely believed all *knowledge*, because of the nonsensible, is of intrinsic

<sup>10</sup> Also, Derk Pereboom devotes his excellent paper, "Kant's Amphiboly" (op. cit.), entirely to the inner/outer pair, so a lot of what needs to be done has already been done. I am not sure I agree with him, however, when he says all the other concepts of reflection are parasitic on the inner/outer pair.

properties, that would have been enough to make Kant's response apposite. Kant did not need to stick him with the stronger ontological claim.

Kant's response is clever and very different from what it has often been taken to be. At first blush, it appears to be a pure begging of the question. He *assumes* that "objects of ... intuition can be given to us" and urges that Leibniz "has made abstraction" illicitly from the conditions of doing so (A284/B340). He is not begging the question, however, because Leibniz accepted that we have what Kant called objects of intuition. He merely denied that their appearing in sense experience contributes anything to knowledge. So what are these conditions from which Leibniz has illicitly abstracted? The main one is space: "Something is contained in intuition which is not to be met with in the mere concept of a thing and ... which could never be known through mere concepts, namely, space ..."; space, being purely relational (i.e., not a matter of inner properties), "can never be represented *by mere concepts*" (A284/B340). Would Kant have said the same of time? Whatever the answer to that question, Kant could then have written "QED". Instead, he makes one further point: merely because space "can never be represented *by mere concepts*, I may not ... claim that there is *not* ... in the things themselves which are subsumed under those concepts ... something external that has no basis in anything wholly inner" (A284/B340). In light of his repeated claims earlier in the *Analytic* that noumenal objects are *not* in space (or time), this is an interesting assertion.

Whatever the merits of Kant's reading of Leibniz or this argument against him, the argument has less general interest than his arguments in connection with the two earlier pairs of Concepts of Reflection, so we will move on.

As we said, Kant has something rather broader in mind by the terms matter and form than anything that would occur to us now, something more like the Aristotelian distinction between utterly formless stuff and the forms taken by this stuff when it becomes an object. Both matter and form are required for representation of objects. This is evident in the case of empirical representation: it requires "the raw material of sensible impressions" in addition to the forms provided by concepts and the forms of intuition. It is also true, Kant insists, for ideas that transcend the possibility of experience. The understanding, Kant tells us, "demands that something be first given, at least in concept", then makes judgments to determine its nature (A267/B323).

Here is how the matter/form distinction relates to the sources of representations, to Transcendental Reflection. In the understanding, something is "first given", then informed. That is, we must take up the "stuff" of an object before we recognize its nature—or its relationships to other objects. But, as Kant put it, "if they are ... sensible intuitions, in which we determine all objects merely as appearances, then the form of intuition ... is prior to all matter (sensations); space and time come before all appearances and before all data of experience" (A267/B323). Thus, Kant is saying, the order of priority between matter and form in the understanding is the reverse of what it is in sensibility. Actually, he understates the differences between the two cases: what he is really pointing to is two very different kinds of matter and two very different kinds of form, though he seems not to have noticed it. The two kinds of matter are

sensations and the raw material of conceptual judgments and the two kinds of form are the framework of space and time and the judgments that result.

## 7. Numerical Identity and the Table of Categories

Kant's arguments in connection with the first two pairs of concepts of reflection relate to the rest of the *Analytic* rather curiously. Let us consider identity and difference first.

Remarkably, Kant's observations about numerical identity in the Appendix constitute the first and only discussion of the concept in the whole first *Critique*! The concept is not part of the Table of Categories and Kant does not discuss it anywhere else. "But he used the concept of identity over and over!", it will be objected. He did indeed; how could he not? It underlies the synthesis of recognition. In the A-edition he even uses the word "identity" in this connection once (A115). He refers explicitly to the identity of consciousness a number of times (e.g., A108, A113). He speaks of the notion of a unit, a quantity of one, in connection with the synthesis of apprehension (e.g., B162) and of the "successive apprehension of an object" (A145/B184) in the Schematism. He talks of the "identity of the substratum" through change in the First Analogy (A186/B229): for change to be possible, some unit of something must persist through the change. And in the Second Analogy he lays out some of the conditions of apprehending an object as a single persisting object (A198/B243). Indeed, the argument of the First Analogy uses the concept of numerical identity in a most direct way—Kant says that for change to be possible, some unit of something must persist through the change.<sup>11</sup>

In short, prior to the Appendix, Kant makes extensive *use* of the concept of numerical identity. He makes even more direct use of it and by name after the Appendix in the critique of the second and third paralogisms (e.g., A362). Identity at a time is one major theme of the attack on the second paralogism and identity over time is the *whole* topic of the attack on the third.<sup>12</sup>

Despite using the concept of identity so frequently, however, Kant nowhere *discusses* it until the Appendix. This is more than a little strange. What could be more basic to representation of objects or a theory of synthetic knowledge generally than individuation and re-identification? Surely they are at least as basic as, say, modality. Strange to be sure; but true. The only place where Kant discusses numerical identity in the whole first *Critique* is in this little Appendix.

<sup>11</sup> I owe the observation about how directly the concept of numerical identity is at work in the First Analogy to William Harper.

<sup>12</sup> See my *Kant and the Mind* (Cambridge University Press, 1994), chs 7 and 8.

Even in the Appendix, Kant's treatment is peculiar. Having shown that the notion can do some good work, what does he do? He drops the subject! This in a philosopher one of whose key interests is uncovering the conceptual resources we must deploy if we are to represent objects. Remarkable!

Concerning the Table of Categories, the first question that comes to many people is, "Why is numerical identity not part of it?" The question must have worried Kant because he suddenly takes it up for no discernible reason in the Appendix. There he denies that the Concepts of Reflection are categories—as of course he must if his claims about the completeness of the Table of Categories are to survive. Identity and difference and the other concepts of reflection, he tells us, "are distinguished from the categories by the fact that they do not present the object according to what constitutes its concept (quality, reality), but only serve to describe in all its manifoldness the comparison of the representations which is prior to the concepts of things" (A269/B325). The same issue again pops up out of nowhere in the *Prolegomena* (the only place concepts of reflection are ever mentioned after the first *Critique*). There Kant says again that we must not confuse concepts of reflection and categories; categories apply to objects, "whereas the former are only concepts of a mere comparison of concepts already given and therefore are of quite another nature and use" (4:326).

Put together, the two passages present a problem. In the first passage, Kant seems to suggest that we apply the concept of identity and the other concepts of reflection *prior* to application of the categories and representation of objects, whereas in the second, the concepts of reflection seem to come in *after* application of the categories. Yet neither suggestion is consistent with the way he himself used the concept of numerical identity in the Synthesis of Recognition in a Concept (found in both editions). There he insisted that not just retaining but also re-identifying an object as one presented earlier (i.e., recognizing that an object "is the same as what we cognized a moment before") is *part of* recognizing it as an object. Yet we recognize it as an object via the application of categories (A103; see B130-1). If so, a judgment of numerical identity is *part and parcel* of application of the categories. It could not be something that happens either before or after application of the categories, contrary to what he said later. If, however, a judgment of numerical identity is part of applying the categories, how could it not be a category? It has to be part of the conceptual structure that all represented objects share. If the Table of Categories has to include number, qualities, relations, and modality (existence status), surely it should also include a thing being one thing and remaining the same thing over time.

In the precritical writings, Kant's name for what he called analytic relationships in *CPR* was the "law of identity" (we will return to it). It would have been part of what he calls General Logic. Since the Categories are part of Transcendental Logic, if Kant thought that numerical identity is part of General Logic, that would have been reason enough for leaving it off the Table of Categories (and relegating the concept to an appendix).<sup>13</sup>

If this were Kant's view (and there is not a lot of evidence one way or the other), he would have been wrong by his own lights. Kant's clearest specification of transcendental logic is that "it concerns itself

<sup>13</sup> Stephen Palmquist made this suggestion.

with understanding and reason solely insofar as they relate *a priori* to objects” (A57/B81). Applying the concept of numerical identity to experience is applying a concept to experience, one moreover that would appear to be as necessary for experiencing objects and therefore as *a priori* as any of the ones that did make the Table.

Another reason for leaving numerical identity off the Table may have been this. Kant saw logic, specifically the Aristotelian forms of judgment, as the template for the categories. To generate the categories, he just filled out the forms of judgment with some content. That this move forces the exclusion of numerical identity would be enough by itself, I think, to show how bad a move it was.<sup>14</sup>

To try to rescue Kant from a claim that he should have included identity in the Table of Categories, one might think of a number of moves. None works very well.

1. “Perhaps Kant thought that the concept of identity was already built into the concept of quantity.” That will not work; the concept of being one thing of a particular kind at and over time goes far beyond the notion of simply being a unit. Kant himself made roughly the same point about the unity of consciousness when he said it is not “the category of unity” (B131).
2. “Perhaps numerical identity is supposed to fall out of the schematization, the temporalization, of the concept of number.” This proposal seems plausible, initially, because schematization does add the notion of permanence/persistence. However, (a) by then, Kant has already used the concept of numerical identity a number of times, and (b) Kant did not say a word about identity in the Schematism section, or anywhere in the Principles. Above I cited all the uses of the concept of numerical identity not just in the Schematism but in the whole Analytic of Principles. As we saw, he talks about successive apprehensions of the same object in the Schematism, of persistence through change in the First Analogy, and of recognizing an object by its spatio-temporal and causal relations in the Second Analogy—but he never once mentions numerical identity, not by name.
3. “Perhaps Kant considered the concept of numerical identity to be a collective responsibility of some combination of the classes of categories.” On this proposal, individuation would result from using two or more of the four classes of categories, perhaps quantity (number and quantitative magnitude), quality (degree), and relations. This suggestion is interesting—the attack on the Amphiboly is indeed based on qualitative identity being compatible with difference of number—but again Kant’s failure even to mention identity and individuation is left unexplained. Anyway, the test for inclusion in the Table of Categories is not derivability—a number of the categories can be derived from other categories. The test is whether applying a concept is necessary for representing objects. By this test, identity would have to be

<sup>14</sup> A confusion over the nature of a concept of reflection may also have played a role in Kant’s mistake about identity in relation to the categories. On the pattern Kant usually used in his nomenclature, a concept of reflection should be a concept *used to perform* reflection. But the concepts that Kant calls the concepts of reflection are not concepts *used to perform* reflections, they are concepts used to form the judgments that are the *targets* of acts of reflection. The concepts of identity and difference, agreement and opposition, etc., are *used in* relational judgments, not in *reflections on* these judgments. It is hard to see why we would need any additional concepts to reflect on such judgments.

included. In short, it is not easy to think of a way to rescue Kant from the problem that identity poses for the completeness of the Table of Categories.

In connection with the Table of Categories, we have focused on the concept of identity but a similar question could be asked about the other concepts of reflection: agreement and opposition, inner and outer, and matter and form. Is it not just as necessary and just as transcendental (just as much a matter of relating *a priori* concepts to objects of experience) that an object of representation be compatible with some things and in opposition to others as that it be individuated and re-identifiable? Or that it have inner and, in most cases, outer properties? Or that it consists of some kind of informed material? Well, maybe; but at least opposition, the outer, and form, being relational concepts, can be accommodated within the categories that Kant allowed under the heading of Relation. Perhaps Kant would have viewed them as what he called predicables, concepts one could develop out of the categories if one wished to do so (A82/B108). To be sure, relations of opposition, the outer, and form are no less primitive than the relations Kant treats as nonpredicables (namely: inherence, causality, and reciprocity), but at least we can offer something here. Nothing seems to be available to help with numerical identity.

## 8. Concepts of Reflection and Sensible Intuition

Kant's remarks in the Appendix about identity are interesting in their own right. In addition, as we saw, they form the basis of one of his two arguments there for the need for sensible intuition. The other arises from his treatment of agreement and opposition. Kant had argued for this need, as is well-known, in the *Inaugural Dissertation* of 1770 and he reaffirmed it repeatedly in *CPR*. But these are the first arguments for the claim anywhere in *CPR*. Why do they come so late?

Kant's claim about the need for sensible intuition is stronger than is sometimes recognized. The famous saying, "thoughts without content are empty" (A51/B75), might lead one to think he is merely claiming that without sensible intuition, we would have no way to adjudicate beliefs, sift the true from the false. In fact, he is saying something much stronger than that. He is saying that without sensible intuitions, our thoughts would have no objects at all: "... in no other way can an object be given to us" (A19/B33). He repeats the point in the Appendix before us: "If we abstract from these objects [viz., objects derived from sensible intuition], the concepts [of understanding] have no relation to any object" (A286/B342), and says much the same thing again a couple of times in the *Prolegomena* (4:312,324). This is a measure of the depth of his disagreement with Leibniz. Yet—and this is the observation that launched our discussion—the first *arguments* for the claim occur in the little Appendix before us.

Kant argues for the need for the *forms* of sensible intuition, space and time, in the Aesthetic and he identifies sensibility as one of the "two stems of human knowledge" as early as the Introduction (A15/B29) and the first paragraph of the Aesthetic (A19/B33). Indeed, in the Preface to the B-edition (Bxxv-vi), he says explicitly that intuition is *necessary* for knowledge and tells us he will prove the assertion in "the analytic part of the *Critique*". He urges that we need sensible intuition again a number of times in the

first two paragraphs of the Transcendental Logic, saying, for example, “without sensibility no objects would be given to us” and, famously, “thoughts without content are empty” (A51/B74), and repeatedly thereafter throughout the *Analytic*. The trouble is, not once does he offer an argument for it—until he gets to the Appendix.<sup>15</sup>

This might not be as surprising as it appears. Ten years elapsed between the *Inaugural Dissertation* and the final assembling of *CPR*. That was more than enough time for Kant’s interests to have shifted. Whereas the role of sensible intuition was front and centre in the *Dissertation*, in *CPR* Kant’s focus is first of all on the shape, justification, and limits of the nonsensible, the *a priori* component of knowledge. The Introduction, for example, is entirely devoted to the sources of *a priori* and yet synthetic knowledge. When sensible intuition does appear, as it does at the very beginning and the very end of the Introduction and in the first paragraphs of the Aesthetic, Kant advances no argument for his claim that we need it. He acts like he is entitled to lay down the idea without argument. That was not how he proceeded in the *Inaugural Dissertation*<sup>16</sup>

The new centre of Kant’s interests is clearest in the Transcendental Deduction. It is entirely about why there has to be a nonexperiential component in knowledge, what this component is like, and (in the B edition) how empiricists such as Locke and Hume missed the boat (B127-8). So much does Kant now take the role of sensory experience in knowledge for granted, even his question presumes it. For his question (A94/B126, A95-6) is: What are the necessary conditions of experience? Even when he discusses space and time, as he does in the Aesthetic at the beginning of the work, their nature and their role in knowledge is now what interests him, not whether spatiotemporally-located contents are necessary for knowledge in the first place. Moreover, the Dialectic can be viewed as a single extended argument for the claim that the nonexperiential component cannot yield knowledge without experience. But it comes even later in the book.

In short, the absence in the *Analytic* of any argument for the claim that sensible intuition is required for knowledge is striking. The place where the need for such an argument is most pressing is in the opening pages of the Transcendental Logic, where Kant makes his famous claim, “thoughts without contents are empty” (A51/B75). What are Kant’s reasons for saying this? He offers none. From then on, he acts as though the claim has been established and simply plugs it into other arguments and analyses as needed.

One tiny exception to the above comes near the end of the A-edition Introduction, where Kant tells us that to have more than analytic truths, to know anything synthetic, we need, in addition to subject and predicate, some third element to connect them. With synthetic *a posteriori* judgments, he tells us, ex-

<sup>15</sup> Kant explicitly makes this matter/form distinction on A86/B118, A166/B207, and A267/B323. The lack of an argument that sensible intuition is needed may be connected to another and larger gap. Kant never tells us what controls the contents of sensible intuition when they are controlled—and control is needed if any experiences, even wide-awake perceptions, are to rationally constrain belief. I discuss this gap in “Critical Notice of L. Falkenstein, *Kant’s Intuitionism: A Commentary on the Transcendental Aesthetic*, *Canadian Journal of Philosophy* 29 (1998), 247-68.

<sup>16</sup> The way Kant takes the role of sensible intuition for granted in *CPR* is displayed most clearly in the B-edition Preface; see e.g., Bx, Bxiii-iv, and Bxix. However, he does this in A, too. See, e.g., A39/B56 on “the certainty of empirical knowledge”.

perience builds the bridge (A8). However, he seems to take this to be obvious; he offers no argument. Instead, he turns to a contrasting idea that is clearly the point of the passage: it could *not* be experience that builds the bridge in synthetic *a priori* judgments. (He says the same at B15-16 and A151/B196.) Unfortunately, the contrast he is pushing here between synthetic *a posteriori* and synthetic *a priori* judgments is in some tension with his repeated claim that sensible experience is a required component of *all* knowledge. This remark at A8 about the role of experience in *a posteriori* judgments mattered to him so little that he deleted the passage in the second edition (though the new paragraph put in its place does contain a related thought). So the remark is not much of an exception.

Two obscure passages in the sections immediately prior to the Appendix, the General Note to the Principles (occurring only in the B-edition) (B288) and the chapter on Phenomena and Noumena (A240/B299), appear to contradict what I just said. However, (a) like the Appendix, they too come right at the end of the Analytic and (b) they merely anticipate the analysis in the Appendix and cannot be understood without it.

By contrast, the Appendix on the Amphiboly, as we have seen, does offer arguments for the claim, indeed two such arguments. Most commentators focus on the drops of water argument. At first glance, it appears to be decisive. It is not, not by itself. What it shows is that spatial location plays a role in some judgments of identity. But spatial location is part of one of the two *forms* of intuition. Therefore, the drops of water example is no argument that we need sensible *contents*.<sup>17</sup> However, if we add some moves that Kant would have found plausible, it can be turned into such an argument. We would just need to add that there can be no space without spaces and no spaces without spatial content

The argument from agreement and opposition works as it stands. As we saw, Kant argues that we could be aware of the way pain cancels pleasure, the way one force can counteract another, and so on, only via sensible experience. This is a powerful argument. That these arguments appear so late in *CPR* and in an appendix at that is puzzling.

## 9. History of These Arguments in Kant

Their late appearance in *CPR* was not because either argument was new to Kant. In fact, both arguments go all the way back to his first purely philosophical work, *Dilucidatio* (1755). Given that Kant offers no argument for the assertion that sensible experience is needed when he advances it early in *CPR*, it is puzzling that he did not at least bring these old arguments back into service—a perplexity only strengthened when we notice that he does offer an argument, indeed a related argument, for the claim at the appropriate place in the *Prolegomena*, the argument from incongruent counterparts (e.g., left- and right-handed gloves) (4:285-6). Let us look at the history.

<sup>17</sup> I owe the observation that Kant's appeal to the drops of rain may by itself prove less than he thinks it does to Lorne Falkenstein.

Here is how the argument from indiscernible non-identicals appears in *Dilucidatio*. Says Kant, “things which are distinguished ... in virtue of space are not one and the same thing” (1:409). That is, indiscernibles having different spatial locations are not identical. As for nonsemantic opposition, Kant discusses forces and collisions at some length and clearly articulates the contrast between what we have called nonsemantic and semantic oppositions (1:407-8). To be sure, Kant seems not yet to have noticed the potential of these arguments to create problems for Leibniz. Indeed, he treats them as compatible with Leibniz’s epistemology. But they are there.

By 1763, Kant was explicitly directing similar arguments against Leibniz. As Kant read him, for Leibniz all real knowledge consists in uncovering analytic truths (i.e., spelling out in predicates what is contained in the subject of those predicates). To do this spelling out, we use what Kant calls, as I said, *the law of identity* (he means the content of the predicate being identical to at least part of the content of the subject, not numerical identity of objects).<sup>18</sup> In the 1763 work *Negative Magnitudes*, he goes after this nonempirical, semantic-relation-based theory of knowledge. With objects in space, he urges, “the motive forces of one and the same body which tend in exactly the opposite directions [can be] opposed to one another; [they] cancel their reciprocal consequences, namely, the motions” (2:193). Similarly for colliding objects, amounts of money, ships on multi-leg trips, and others (2:171-8). Such “real oppositions” are utterly different from the “logical oppositions” of contradictory concepts or propositions (2:172; see also 2:194, where he even uses the example of pain cancelling pleasure). By the end of the work, Kant takes it as established that logical form and semantic relations could not be all there is to knowledge (2:202):

I understand very well how a consequence can be posited by a ground according to the rule of identity, because it is found contained in it by dissection of the concept. But how something follows from something else, yet not according to the rule of identity—that is something which I would be glad to be able to make plain.

Though Kant does not mention Leibniz by name, he is clearly saying that awareness of real oppositions requires a non-conceptual activity of the mind. By 1770 he was calling this activity Sensibility (2:392f).

The argument from nonidentical indiscernibles did not reappear in the works of the 1760s. However, a closely related argument does: the argument from incongruent counterparts (again, left- and right-handed gloves are an example). It is closely related because it too is an argument that a difference between two things of which we are clearly aware cannot be expressed in a description. Kant used this argument in both 1768 (in “The Ultimate Foundation of the Differentiation of Directions in Space” [2:383]), where it is not aimed at Leibniz, and 1770 (in the *Inaugural Dissertation* [2:403]), where it is. Though it does not appear in *CPR*, it did appear again later, in the *Prolegomena* (4:285-6).

<sup>18</sup> Kant continued to accept this picture of analyticity in his Critical period: see, e.g., the Introduction to the first *Critique* (A7/B10-11). A real question is how much of rationalist epistemology Kant wanted to reject. Clearly, he rejected the idea that knowledge is independent of sense experience—but would he, for example, have rejected Descartes’ analysis of the ball of wax, that our reasoning that it must remain the same chunk of wax through various transformations is more reliable than what our senses tell is, that there has been a succession of different objects? Given his respect for the postulation of nonobservables in physics, this seems unlikely.

So by 1770, indeed by 1763, Kant was firmly settled in his view that sensible intuition is required for at least some kinds of knowledge, that there is a huge difference between “sensitive knowledge and that deriving from the understanding” (2:419). He seems not to have reached his own mature position, that *both* sensible intuition *and* use of concepts are needed for most kinds of knowledge, until *CPR*; but his critique of Leibniz on the purely conceptual nature of knowledge was largely complete by 1770. Given the effort expended in the *Inaugural Dissertation* on establishing the need for sensible experience, it is interesting that, of the arguments we have been discussing, the only one that plays a role in it is the argument from incongruent counterparts.

This history puts paid, as Guyer and Wood note in the Introduction to their translation of the first *Critique*,<sup>19</sup> to the idea that up until being awakened from his dogmatic slumbers in the 1770s, Kant was an uncritical Wolffian rationalist. The first *Critique*, Kant once said in a letter, was all in service of a principle “unequivocally presented in the whole *Critique*, from the chapter on the schematism on, though not in a specific formula. It is this: all synthetic judgments of theoretical cognition are possible only by the relating of a given concept to an intuition.”<sup>20</sup> As, though not yet so clearly, is the earlier work just cited.

To sum up, the absence of arguments for the need for sensible intuition in *CPR* up to the Appendix, and the relegating of the arguments just discussed (when they do appear) to an appendix, are peculiar. When Kant first claimed early in *CPR* that sensible intuition is needed for knowledge, if he did not have new arguments, why did he not at least reintroduce his earlier, pre-critical arguments? If the arguments from nonidentical indiscernibles and real opposition were not material for an obscure appendix in 1755 or 1763, what could have made them material for an obscure appendix in 1781?

## 10. What happened to Transcendental Reflection?

I will close with another puzzling question: Why does transcendental reflection<sup>21</sup> not appear anywhere earlier than our Appendix, neither in the first *Critique* nor pre-critically, and why does Kant never discuss it again? (He does mention the notion once in the opening paragraphs of the Dialectic a few pages later and once in the *Prolegomena* [4:326], as we noted in note 3, but he never discusses it again.) Transcendental reflection should have been a promising Critical method.

The first move in the Critical project that Kant did pursue, the Critical project of the Analytic, is to ask (A94/B126, A95-6): What are the necessary conditions of experience? More precisely: What are the

<sup>19</sup> Paul Guyer and Allen Wood, “Introduction”, in *Critique of Pure Reason* (Cambridge: Cambridge University Press, 1997), 23.

<sup>20</sup> Letter to Reinhold, May 12, 1789, in Arnulf Zweig (tr.), *Kant: Philosophical Correspondence 1759-99* (Chicago: University of Chicago Press, 1967), 141.

<sup>21</sup> The German word translated as “Reflection” is “*Überlegung*”,

necessary conditions of being able to represent objects?<sup>22</sup> The question at the heart of transcendental reflection is precisely analogous: What are the sources of knowledge necessary for the objects of our representations to have the relationships to other represented objects that they have? So why did Kant make so little of the term?

Part of the explanation is that Kant did do the work in other places, both pre-critically and in the first *Critique*, but under other names. One notable example is the method for metaphysical inquiry sketched in the *Prize Essay* (1764) and detailed in the *Inaugural Dissertation* (1770). It is Transcendental Reflection by another name.<sup>23</sup> In particular, in the latter work Kant introduces what he calls the fallacy of subreption and invokes his new doctrine that space and time are the subjective conditions of sensibility to expose a key example of it. The fallacy of subreption is the mistake of predicating spatial and temporal properties of intellectual objects (2:411-2). The method used to expose it is transcendental reflection by another name and the mistake thus exposed is an amphiboly, though a bit different from the one attacked in the Appendix. There, chez Kant, Leibniz denied that sensibility provides knowledge. Here Leibniz gives objects of the understanding spatio-temporal properties.

In the same period, about 1770, Kant once described a strategy that he called general phenomenology. In a 1770 letter to Lambert, Kant wrote:

...A quite special although purely negative science, general phenomenology (*phaenomenologie generalis*), seems to me to be presupposed by metaphysics. In it the principles of sensibility, their validity and their limitations, would be determined, so that these principles could not be confusedly applied to objects of pure reason, as has heretofore almost always happened.... Extremely mistaken conclusions emerge if we apply the ... concepts of sensibility to something that is not at all an object of sense...<sup>24</sup>

This too sounds like a kind of Transcendental Reflection.<sup>25</sup>

Similarly, in all three chapters of the Dialectic, Kant paid close attention to the sources of knowledge: knowledge of the self in the Paralogisms, of the world in the Antinomies, and of “all reality” in the Ideal. Indeed, when he claims, against the Third Paralogism, that, from my use of the “same-sounding I” (A363), no inferences to the objective permanence of myself can be made, what he is attacking is a pure fallacy of subreption. The same is true of his claim that from the fact that we must presuppose a notion of all empirical reality in experience, nothing follows concerning the nature of “things in general” (A582/B610). Indeed, the actual term “subreption” makes brief, unexplained appearances in all three chapters. In the first-edition Paralogisms it appears at A389 and A402, in the Antinomies at A509/B537,

<sup>22</sup> The form that Kant’s question took in the A-edition Transcendental Deduction (A96-7), and, less obviously, in Section §15 of the B-edition Deduction (B130).

<sup>23</sup> Butts discusses this correspondence in his introduction to *Kant’s Philosophy of Physical Science*. He goes so far as to claim that, “what Kant discusses in the Amphiboly is exactly the set of ideas put forth in *ID* [the *Inaugural Dissertation*]” (10). This cannot be entirely right. There is, to be sure, some overlap but there is also a lot of lack of overlap between the two works.

<sup>24</sup> September 2, 1770, in Zweig, *Correspondence*, 59-60.

<sup>25</sup> Butts suggests, indeed, that Kant’s plan for a general phenomenology is actually worked out in the Transcendental Aesthetic and the Appendix on the Amphiboly. In my view, this is an overstatement.

and in the *Ideal* at A582/3/B610/11 and A619/B647.<sup>26</sup> Kant says not a word by way of introducing the term in any of these places and seems to assume that we will know what he means by it. Yet Kant never used the words “transcendental reflection” in any of these passages nor anywhere else.

In a *Reflexion*, R5552 (18:218), probably written in 1778/79 as *CPR* was being finished, Kant makes a revealing connection. He says that “Concepts of Reflexion (their Amphiboly)” “can lead to paralogisms”, then lists the four pairs of concepts of reflection. Though he crossed out “can lead to paralogisms”, he gives his standard definition of “paralogism” between the opening remark about concepts of reflection and the list of the concepts of reflection, so he clearly intended the link to stand. After he lists the concepts of reflection, he then goes on to discuss issues that became the content of the Antinomies and the *Ideal*. These links between the concepts of reflection and the subject-matter of the three chapters of the *Dialectic* raise an interesting possibility. By the time Kant had finished the *Dialectic*, perhaps he thought that the important work of transcendental reflection had been done, not under that name, of course. If so, he may have further thought that he could safely relegate any remaining, purely anti-Leibnizian points to an appendix.

If those were his thoughts, he had overlooked a perhaps better alternative. Instead of writing the little appendix that we have been examining, he could have:

- (1) Introduced numerical identity and discussed it properly when he introduced the categories;
- (2) Moved the arguments for the need for sensible intuition to early in *CPR* where they belong;
- (3) Introduced subreption properly and combined it with his account of transcendental reflection;  
and
- (4) Moved the combined discussion to the opening pages of the *Dialectic*—where indeed he does mention transcendental reflection.

In this paper, I have examined five issues with respect to Kant’s Appendix on the Amphiboly of the Concepts of Reflection: (1) Kant’s treatment of identity, especially his critique of Leibniz’s principle of the identity of indiscernibles and the related treatment of the distinction between identity of qualities and identity of number and what he calls real opposition; (2) the relationship between the concept of numerical identity and the categories; (3) Kant’s arguments for the necessity of sensible contents in knowledge (the first such arguments in the first *Critique*); (4) the novel strategy Kant used to generate these analyses, a strategy he calls transcendental reflection; and (5) the puzzling history of these themes in the pre-critical and early Critical philosophy.<sup>27</sup>

<sup>26</sup> The term also appears once in the Appendix to the *Dialectic* at A643/B671 and once in the *Method* at A792/B820.

<sup>27</sup> Thanks to Jennifer McRobert for historical leads and to audiences at the APA Eastern Division, University of Western Ontario, University of Maryland, University of Waterloo, and Carleton University.

