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Author(s): Ian Proops

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Kant's Conception of Analytic Judgment

IAN PROOPS
University of Michigan

In the *Critique of Pure Reason* Kant appears to characterize analytic judgments in four distinct ways: once in terms of "containment," a second time in terms of "identity," a third time in terms of the explicative-ampliative contrast, and a fourth time in terms of the notion of "cognizability in accordance with the principle of contradiction." The paper asks which, if any, of these characterizations—or apparent characterizations—has the best claim to be Kant's fundamental conception of analyticity in the first *Critique*. It argues that it is the second. The paper argues, further, that Kant's distinction is intended to apply only to judgments of subject-predicate form, and that the fourth alleged characterization is not properly speaking a characterization at all. These theses are defended in the course of a more general investigation of the distinction's meaning and tenability.

Few ideas from the *Critique of Pure Reason*¹ have had a greater impact on the course of analytic philosophy than Kant's celebrated distinction between analytic and synthetic judgments. But despite the distinction's acknowledged importance, and despite a long-running debate over its coherence, many questions about the details of its original formulation remain unsettled. Is Kant attempting to frame a distinction that applies to judgments in general, or only to some privileged sub-class of them? Does he mean to be characterizing analyticity in broadly metaphysical terms—terms, that is, that appeal to a judgment's constituent structure, or does he mean to be appealing (also) to epistemic considerations—for, example, how a judgment could in principle be known? Is it even possible to extract a unified conception of analyticity from Kant's various remarks? The last question arises because in the first *Critique* alone Kant appears to characterize analytic judgments in no fewer than four distinct ways: once in terms of "containment" (A 6-7/B 11), a second time in terms of "identity" (A 7/B 11), a third time in terms of the expli-

¹ In translating passages from the first *Critique* I usually follow the translation of Paul Guyer and Allen Wood. See Kant (1998). In other cases, except where indicated, I have followed the translation in the relevant volume of *The Cambridge Edition of the Works of Immanuel Kant*. Passages from Kant's other works are cited by volume and page number of the *Akademie Ausgabe* (Kant, 1968), hereafter "Ak.," which also forms the basis for my own translations.

cative-ampliative contrast (A 7/B 11), and a fourth time by reference to the notion of “cognizability in accordance with the principle of contradiction” (A 151/B 190). Can these formulations—or apparent formulations—be reconciled? If not, which among them is the most central to Kant’s conception of analyticity in the first *Critique*?

The present essay is an attempt to make progress with these questions by taking a fresh look at Kant’s discussion of analyticity as a whole. I will argue that the characterization that captures what is most fundamental in the first *Critique*’s conception of analyticity is the second—or a cleaned up version of it. But I shall also argue that from the *Prolegomena* (1783) onwards Kant tends to put more weight on the third characterization. I will argue, further, that the distinction is intended to have a narrow scope: it applies—and is intended to apply—only to judgments of subject-predicate form. These theses will be defended in the course of a more general investigation of the distinction’s meaning and tenability. The most straightforward way to proceed will be to survey the various (supposed) formulations of the distinction, beginning with the best known of them—the so-called “containment criterion.”

1. The “Containment Criterion”

In the first *Critique* Kant introduces the analytic-synthetic distinction as follows:

In all judgments in which the relation of a subject to the predicate is thought (if I consider only affirmative judgments, since the application to negative ones is easy) this relation is possible in two different ways. Either the predicate B belongs to the subject A as something that is (covertly) contained in this concept A; or B lies entirely outside the concept A, though to be sure it stands in connection with it. In the first case I call the judgment analytic, in the second synthetic. (A 6-7/B 11)

Despite being well-known, this passage raises a question that is rarely addressed: Does Kant intend to be classifying affirmative judgments in general, or only such of them as are true? Most commentators have assumed the former, apparently because they hear Kant as saying simply that an affirmative analytic judgment is “one in which the predicate is contained in the subject.”² But such a gloss misleadingly suppresses an important nuance of Kant’s formulation. What he actually says is that an affirmative analytic

² The practice of suppressing the reference to the predicate’s “belonging” to the subject is absolutely standard, and goes back to Kant’s first expositor, Johann Schultz. In his 1784 work, *Exposition of Kant’s Critique of Pure Reason* (Schultz (1995)), Schultz characterizes an analytic judgment as “one in which the predicate is already contained in a covert way in the concept of the subject” (ibid, p. 10). Variations on Schultz’s gloss have since been repeated many times. See, for example: Kneale and Kneale (1988, 56-7); Pap (1966, 27); Coffa (1991, 13); Gardner (1999, 54) and Anderson (2004, 501). A notable exception is van Cleve (1999, 18).

judgment is one in which the predicate *belongs* [*gehört*] to the subject *as* covertly contained in it.³ This difference may seem trifling, but it matters, since Kant allows that a predicate may “belong” to a concept without being contained in it. Thus when he raises the question: “How is *a priori* synthetic knowledge possible?” he asks how it could be possible to cognize the concept of “cause” as necessarily “belonging” [*gehörig*] to the concept of “something that happens” even though it is *not* contained in it (A 9/B13). He means: How can we know that the judgment “every happening has a cause” is necessarily *true* when the concept of “cause” is not contained in the concept of “something that happens”? So, in the present context, what it means to say that one concept “belongs” to another is that they occur as predicate and subject-concept in a *true* universal affirmative judgment. But, that being so, the idea behind the containment criterion must be that an affirmative analytic *truth* is a judgment whose truth is owed to the obtaining of a relation of containment between the subject and predicate concepts, while an affirmative synthetic truth is an affirmative judgment whose truth is not so explained.

Because Kant is drawing a distinction between two kinds of true judgment, the question arises whether he would regard *false* judgments as admitting of a parallel classification. And perhaps surprisingly, this appears to be so. In a Reflexion conjecturally dated to 1792 (R 6327, Ak. 18: 648), Kant describes the judgment “a resting body is moved” as “analytic and false.”^{4,5} He does not repeat this claim in any of his published writings, but the conception behind the idea of analytic falsehood, if not the terminology, is clearly present in his 1763 essay *Attempt to Introduce the Concept of Negative Magnitudes into Philosophy* (Ak. 2: 164-204) (hereafter “Negative Magnitudes”). In that work Kant draws a distinction between “real” and “logical” opposition: the former involves the cancellation of two oppositely signed real quantities—e.g., the motions of two bodies moving with the same speed in opposite directions—while the latter involves the cancellation of one predicate by another—Kant gives the example of the predicate *mortal* being cancelled by the predicate *infinite*, which is one of the constituent marks of the concept of God (Ak. 2: 203). It seems only a short step from saying that the infinity of God cancels the predicate “mortal” to saying that the judgment “God is mortal” is analytic and false. And, indeed, after coining the terms “analytic” and

³ Kant’s view, more precisely stated, is that in an affirmative analytic judgment the predicate (a concept) belongs to the subject-concept as contained in it. He says: “In the case of an analytic proposition the question is only whether I actually think the predicate in the *representation* of the subject (A 164/B205, emphasis added). In Kant’s phraseology the “subject” is, strictly speaking, what is represented by the subject-concept.

⁴ This observation was first made by Konrad Marc-Wogau (1951, 141-2).

⁵ In classifying some judgments as analytic but false Kant disagrees sharply with Frege. According to Frege, to call a proposition “analytic” is to make a judgment about the ultimate ground upon which rests the justification for holding the proposition to be true (Frege, 1934, §3). A false judgment has no such ground.

“synthetic,” Kant describes logical opposition as “analytic” and real opposition as “synthetic” (*Metaphysik Mrongovius*, 1782-3, Ak. 29: 810). So we may take seriously the idea that Kant is committed to the notion of analytic falsehood, though it also seems clear that this is not a notion he means to be discussing at any point in the first *Critique*. That work, after all, is concerned with drawing a distinction between kinds of *knowledge*, and so with classifying *true* judgments into analytic and synthetic.

A second point about the so-called “containment criterion” that deserves to be more widely appreciated is that containment *per se* is only half the story. Kant expressly indicates that the containment criterion applies only to *affirmative* judgments, and he implies that the idea of containment is merely one application of a more general idea that is equally applicable to negative judgments (A 6/B 10). That more general idea is revealed only much later in the first *Critique* when in the Analytic of Principles Kant says:

In the analytic judgment I remain with the given concept in order to discern something about it. If it is an affirmative judgment, I only ascribe to this concept that which is already thought in it; if it is a negative judgment, I only exclude the opposite of this concept from it. (A 154/B 193, emphasis added)

By “the opposite of the subject-concept” Kant means the negation of one of its constituent marks; so, for example, the concept “unextended” counts as an “opposite” of the concept “body,” as does the concept “non-substance.” Kant’s point is that in making a negative judgment such as “No body is simple” I *exclude* the predicate “simple” (= “not-extended”) from the subject-concept “body.”⁶ In his metaphysics lectures Kant is even more explicit about the complementary role of exclusion. Immediately after discussing affirmative analytic judgments, he continues: “There are also analytic negative judgments. An analytic negative judgment is one where I find through dissection that a certain feature conflicts with the thing, e.g., no body is simple.” (*Metaphysik Mrongovius*, Ak 29: 789). So, strictly speaking, the general idea behind the so-called “containment criterion” is the thought that analytic truth can be characterized in terms of relations of containment *and* exclusion.

A final point to note about the “containment-or-exclusion criterion”—as I shall call it—is that it involves notions pertaining both to the structure of the judgment and to our knowledge of it. In an affirmative analytic judgment the predicate is *contained* in the subject-concept—a structural relation—but *covertly*—a feature relating to the *transparency* of that containment, and so indirectly to cognition. We shall return to this point when we consider the explicative-ampliative contrast.

⁶ Before Kant, Leibniz had invoked the notion of exclusion in connection with negative judgments, in his case in order to supplement his containment account of truth. See Leibniz (1875-90, vii, 208).

2. Two traditional objections

It is customary to criticize the containment-or-exclusion criterion on two grounds. First, it is said to be too narrow because it applies only to judgments of subject-predicate form; second, it is said to be unclear because it relies on an unclear notion of “containment.”⁷ The key observation behind the first objection is obviously correct. The containment-or-exclusion criterion clearly fails to apply to hypothetical and disjunctive judgments; so the distinction fails to be exhaustive—even by Kant’s own lights. But that observation would only amount to an *objection* to Kant if he had *intended* the distinction to apply to judgments not of subject-predicate form. That, however, may be doubted, for when Kant first introduces the distinction, he expressly confines himself to discussing “judgments in which the relation of a subject to the predicate is thought” (A 6/B 10).

Against this, some commentators have argued that Kant must be intending the distinction to apply to judgments beyond those of subject-predicate form because he insists that “every existential proposition is synthetic” (A 598/B 626).⁸ Obviously, however, the significance of that insistence for the question at hand will depend on whether Kant takes existential judgments to lack subject-predicate form. And that seems doubtful. It would be too quick to argue, as Arthur Pap once did, that Kant cannot have taken existential judgments to have subject-predicate form because he denies that existence is a predicate.⁹ For, what Kant actually says in the first *Critique* is only that existence is not a *real* predicate (A 598/B 626).¹⁰ What he means by this is something we should put today by saying that there is no concept whose extension with respect to some possible world would be narrowed by including existence in it as a constituent mark. But the important point for our purposes is that Kant does *not* say that existence is not a *logical* predicate (i.e., not a genuine constituent of a judgment). On the contrary, he says that “anything one likes can serve as a logical predicate” (A 598/B 626), meaning thereby that any *concept* can so figure.

So to determine whether Kant’s remark about the syntheticity of existential propositions indicates that he intends the analytic-synthetic distinction to apply to judgments beyond those of subject-predicate form we shall need to consider what he says about the logical form of existential judgments. His most explicit comments on this matter occur in his 1763 work, *The Only Possible Argument in Support of a Demonstration of the Existence of*

⁷ See Quine’s “Two Dogmas of Empiricism” (especially 20-21 in Quine (1980)) for a classic statement of these objections.

⁸ See, for example, Robinson (1958, 296-297) and Garver (1969, 246-7).

⁹ See Pap (1966, 27).

¹⁰ This observation was made by G. H. R. Parkinson in his (1960). It has been emphasized more recently by James van Cleve (1999, 188-9).

God—a work that anticipates much of the doctrine of the first *Critique*'s criticism of the Ontological Argument:

When existence occurs as a predicate in common speech, it is a predicate not so much of the thing itself as of the thought which one has of the thing. For example: existence belongs to the sea-unicorn but not to the land-unicorn. This simply means: the representation of a sea-unicorn is an empirical concept; in other words, it is the representation of an existent thing. (Ak. 2: 72)

So on Kant's view, when in common speech we appear to be predicating existence of a thing we are really predicating it of the corresponding "thought"—or as we might put it today, "concept." Consequently, the judgment expressed by the sentence [1]: "Existence belongs to the sea-unicorn" is more perspicuously expressed by the sentence [2]: "The concept sea-unicorn is a concept that represents an existent thing"—or, as we might put it, [3]: "The concept *sea-unicorn* is instantiated." This confirms the widely accepted view that Kant is anticipating Frege's idea that "Existence is a property of concepts."¹¹ We should not, however, take the comparison too far. According to Frege, the sentence [1] would be most perspicuously represented by a judgment not of subject-predicate form, namely [4]: "There is a sea-unicorn," where the words "there is" are understood to express a second-level concept—a concept, that is to say, that it only makes sense to predicate of first-level concepts.¹² However, it is important to remember that Frege's view on this matter is in some respects idiosyncratic. He has his own special reasons for rejecting the natural alternative constituent-revealing paraphrase of [1] as the subject-predicate claim [3]. Frege rejects this analysis because he holds that any singular definite description refers to an *object* rather than a concept.¹³ Consequently, by Frege's lights, [3] fails to assert something of a concept and so fails to bring out the idea that existence—in its guise as instantiation—is a property of concepts.

But, of course, Kant is not bound by Frege's special doctrine about the references of singular definite descriptions. He is therefore free to claim that the most explicit representation of the form of the judgment made by uttering [1] is [2]—or as we would put it, [3]. But both [2] and [3] are singular subject-predicate judgments. It follows that Kant's application of the analytic-synthetic distinction to existential judgments cannot be taken as evidence that he intends the distinction's scope to extend beyond judgments of subject-predicate form.

¹¹ Frege 1934, §53.

¹² As Frege makes clear, judgments of the form " $\exists xFx$ " cannot be thought to have subject-predicate form (cf. Frege 1934, §88).

¹³ Frege (1934, §51; §66, fn).

A second text that is sometimes¹⁴ taken to support this conclusion occurs in the *Prolegomena*. There Kant seems to suggest that the distinction applies to judgments regardless of their logical form: “Judgments may have any origin whatsoever, *or be constituted in whatever manner according to their logical form*, and yet there is nonetheless a distinction between them according to their content, by dint of which they are either [ampliative or explicative]” (Ak. 4: 266, emphasis added). The text can seem compelling, but only if one forgets that Kant does not always use the phrase “logical form” in its contemporary sense. Sometimes he uses it in such a way that cognitions can be said to differ in their “logical form” when they differ in their *degree of distinctness*. Such a usage is evident, for example, in the third *Critique* when Kant says:

The distinction between the concepts of the beautiful and the good, which represents both as differing only in their logical form, the first being merely a confused [*verworrener*], the second a distinct [*deutlicher*], concept of perfection, while otherwise alike in content and origin, all goes for nothing: for then there would be no *specific* difference between them, but the judgment of taste would be just as much a cognitive judgment as one by which something is described as good. (Ak. 5: 228)¹⁵

In other words, if the distinction between the concepts of the beautiful and the good were merely a difference of logical form—i.e., *distinctness*—then there would (absurdly) be no difference of kind between judgments of taste and moral judgments. This usage of “logical form,” while admittedly less common in Kant than the more modern usage, is not unusual. It occurs also in the first *Critique* at A 271/B 326-327, in Kant’s “Reflections on Anthropology” (Ak. 15: 79), and in his metaphysics lectures (Ak. 29: 880). It is entirely possible, therefore, that Kant’s point in the *Prolegomena* is just that any subject-predicate judgment may have any *degree of distinctness* whatsoever and still be appropriately classified as analytic or synthetic. Such a reading would comport with Kant’s organizing his subsequent discussion of synthetic judgments under two heads: “Judgments of experience” and “Mathematical judgments,” for judgments in these two categories differ with respect to the distinctness of their constituent concepts. Moreover, the fact that a three-fold distinction between a cognition’s *origin*, its *content* and its *logical form* appears both in the *Prolegomena* and in the third *Critique* would seem to speak in favour of a interpreting “logical form,” when it occurs in the context of that three-fold distinction uniformly across the two works. Accordingly, I take Kant’s point in the *Prolegomena* to be that the analytic-synthetic distinction is a classification of judgments according to

¹⁴ Robert Hanna, for example, cites this passage in support of his view that Kant’s focus on categorical propositions is not a necessary or substantive feature of the theory, but only an expository device. See Hanna (2001, 145).

¹⁵ My translation is adapted from James Creed Meredith’s (Kant, 1986).

their *content*—rather than their origin or logical form—because it classifies judgments according to features of their conceptual composition, rather than their epistemic status (“origin”), or degree of distinctness (“logical form”).¹⁶ So even this remark cannot be taken as compelling evidence that Kant intended the distinction’s scope to extend beyond judgments of subject-predicate form.

Kant’s discussion of the true meaning of the statement “Existence belongs to the sea unicorn” reveals his familiarity with the idea that the grammatical form of a sentence need not mirror the component structure of the judgment it expresses. This might lead us to wonder why he did not attempt to extend the distinction to hypothetical and disjunctive judgments by arguing that, despite appearances to the contrary, all judgments are fundamentally of subject-predicate form.

Lest that suggestion seem anachronistic, we should recall that *Leibniz* had subscribed to just such a view as part of his defense of his predicate-in-the-subject conception of truth. Leibniz’s idea was to treat hypothetical and disjunctive judgments as really categorical in form. So, for example, he suggests that the conditional “If A is B then C is D” may be treated as the categorical proposition: “A’s being B contains C’s being D.”¹⁷ Because containment is a relation that holds in the first instance between concepts, this proposition should be taken to mean “The concept of A’s being B contains the concept of C’s being D,” which (in Leibniz’s view) may in turn be taken to mean: “Every case of A’s being B is a case of C’s being D.”¹⁸ The upshot is that “A hypothetical proposition is merely a categorical proposition, the antecedent being changed into the subject and the consequent into the predicate.”¹⁹ In his 1686 work *Generales Inquisitiones de Analyysi Notionum et Veritatum*, a work falling within his “mature period,” Leibniz expresses the hope that this strategy might be capable of full generalization: “If, as I hope, I can conceive all propositions as terms,²⁰ and hypotheticals as categoricals, and if I can treat all propositions universally, this promises to be a wonderful ease in my symbolism and analysis of concepts, and will be a discovery of the greatest importance.”²¹ The research programme outlined here would

¹⁶ I take it that a judgment’s degree of distinctness will supervene on the degree of distinctness of its component concepts.

¹⁷ Couturat 1903, 260.

¹⁸ Compare: “I usually take as universal a term which is posited simply: e.g. ‘A is B’, i.e. ‘Every A is B’, or ‘The concept of B is contained in the concept of A’.” (Parkinson 1966, 57).

¹⁹ Quoted in Parkinson 1965, p. 32.

²⁰ To conceive of a proposition as a term would be to conceive of, e.g., “A is B” as “A’s being B.”

²¹ Couturat 1903, 377.

indeed be “of the greatest importance” to Leibniz because its success is *pre-supposed* by his predicate-in-the-subject account of truth.²²

This background is relevant to our present concerns because there is a hint that something like the Leibnizian research programme was once a live option for Kant. In some logic lectures from the early 1770’s Kant says that “All judgments are either universal or particular,” adding that “several judgments [as to quantity] do not exist.” (*Blomberg Logic*, Ak 24,1: 275). He means that several apparently primitive judgment-forms are not really primitive. He mentions as examples “singular judgments” and “those where the subject is an individuum,” both of which, he says, are “included among universal judgments” (*ibid.*).²³ At this stage in his career, Kant had already drawn the analytic-synthetic distinction,²⁴ so it seems possible that in the pre-critical period he may have envisaged trying to use a Leibnizian reductive program to widen the distinction’s applicability.

But whatever the truth of this matter, such an expedient would no longer have been available to Kant by the time of the first *Critique*. For in the “Metaphysical Deduction” he insists that exactly twelve forms of judgment—including the hypothetical and disjunctive forms—must be recognized as primitive. Nor is this an incidental feature of the first *Critique*. For Kant saw the recognition of his twelve judgment forms as primitive as essential to the task of providing a *systematic* enumeration of the categories (A80-81/B106-7). In the absence of such a systematic approach, metaphysics could never hope to be set on “the sure path of a science.”²⁵ But although Kant settles for a non-exhaustive classification of judgments, this is not a serious problem from his point of view. He can allow that some judgments are neither analytic nor synthetic, since his chief purpose in drawing the distinction in the first *Critique* is to draw attention to the fact that mathematics, natural science and metaphysics contain judgments that are *a priori* and synthetic. (Kant seems to have taken it for granted that these claims are of subject-predicate form.)

So much, then, for the objection that the distinction is non-exhaustive. It is time to consider the second standard objection to the containment criterion, namely, the charge of unclarity. This objection in fact divides into two sub-objections. According to the first, the facts of containment are hopelessly

²² Cf. “A ‘true proposition’ is one which coincides with ‘AB is B’, or, which can be reduced to this primary truth. (I think that this can also be applied to non-categorical propositions.)” (Parkinson 1966, 59).

²³ Kant agrees with “the logicians” that in their use—presumably he means their use in inferences—singular judgments are to be treated like universal ones, but their form is still supposed to be primitive, since they are assigned their own place in the table of judgments (A71/B96). How Kant can consistently maintain both of these views is unclear.

²⁴ In the *Blomberg Logic*, which is dated to the early 1770s, he says: “[In] our judgments we have two forms, namely, [the] synthetic and analytic form[s]” (Ak. 24, 1: 278-9).

²⁵ *Critique of Pure Reason*, B preface, *passim*.

subjective; according to the second, the notion of containment is merely an unexplained metaphor.

The first sub-objection can be easily turned aside. It was raised in Kant's day by the Wolffian, J. G. Maass (Maass, 1789), and answered almost immediately by Kant's follower J. G. Schulze (Schulze, 1790).²⁶ Put briefly, the objection charges that whether a judgment is analytic or not depends on which ideas a thinker happens to associate with its subject term. It may be that for you the concept of a whale contains the concept of being a mammal but not for me, in which case the judgment "All whales are mammals" would be analytic for you but synthetic for me. The reply to the objection is that it misidentifies the relativity in question. What varies from person to person is not the set of marks a concept contains, but rather the concept that a person associates with a given word. Although two people may well differ in the concepts they attach to the word "whale," and so express different judgments by uttering the sentence "All whales are mammals," it does not follow that there is any *judgment* that is analytic for one person but synthetic for another.

The second sub-objection cannot be so easily dealt with. Although Kant does, arguably, have the resources to explain the notion of containment in non-metaphorical terms, he cannot avail himself of those resources without abandoning another of his core commitments. It will be convenient to work around to this point by considering Kant's second major formulation of the distinction: the so-called "identity criterion."

3. The "Identity Criterion"

In the introduction to the first *Critique*, immediately after his discussion of containment, Kant says:

Analytic judgments (affirmative ones) are ... those in which the connection of the predicate is thought through identity, but those in which this connection is thought without identity are to be called synthetic judgments. (A 7/B 10)

What it is for a predicate to be "connected with" a subject is, plausibly, just for it to "belong" to the subject (cf. A 6-7/B 11). If that is right, then Kant is once again offering a classification only of (affirmative) *truths*. The connection of the predicate with the subject is "thought through identity" when the *truth* of the judgment is secured by the obtaining of a relation of identity between certain of its constituents. Which constituents is made clear by a remark from Kant's metaphysics lectures: "Every analytic feature," Kant says, "is identical with the concept, not with the entire concept, but rather with a

²⁶ Schulze addresses Maass's objection in his Sept 1790 review of the second volume of Eberhard's Wolffian (and anti-Kantian) journal *Philosophisches Magazin* (Schulze 1790, Ak. 20: 408-9). A translation of the objection is given in Allison (1973, 174-5).

part of it, e.g., ‘every body is extended’²⁷ is really judged by identity” (*Metaphysik Mrongovius* (1782-3), Ak. 29: 789).

At first sight it can seem as if the identity criterion involves merely a deeper analysis of the containment-or-exclusion criterion. But because in the first *Critique* Kant allows explicit identities such as “ $a=a$ ” to count as analytic (B 17) the situation must rather be that the identity criterion is offered as a refinement or modification of the containment-or-exclusion criterion—one that relaxes the demand that the identity (or exclusion) should be partial and covert. If this new criterion—hereafter the “identity-or-contradiction criterion”—were to be fully spelled out, it would run as follows: A (true) subject-predicate judgment is analytic just in case *either* it is affirmative and the predicate is identical with a (possibly improper) part of the subject-concept *or* it is negative and the predicate contradicts a (possibly improper) part of the subject-concept. When the judgment is not of subject-predicate form the question of its analyticity does not arise. Analyticity, so understood, is a metaphysical rather than epistemic notion; it is purely a matter of the judgment’s component structure.

Whether one is apt to view the identity-or-contradiction criterion as satisfactory will depend on whether one accepts that the notion of *a part of a concept* is clear. Since that notion has its home in the notion of spatial part, there does seem to be some *prima facie* justice in the charge that Kant has not fully escaped the resort to metaphor. Interestingly, however, Willem R. de Jong (de Jong 1995) and R. Lanier Anderson (Anderson, 2004, 2005) have recently argued that Kant does have the resources to clarify the notion of containment—and so, presumably, also the notion of “a part of a concept”—by appealing to ideas from traditional logic. The key idea is to appeal to the traditional notion of a “logical division” of concepts, as illustrated by porphyrian trees. Such classificatory schemes divide a concept’s extension (in the contemporary sense) into two sub-classes, which are then further sub-divided. The “rules of division” demand that everything in the concept’s extension should fall into one or other sub-class, and that nothing should fall into both. Thus the traditional division of the concept of substance (the genus) divides this concept into two species: corporeal substance (body) and incorporeal substance (spirit). The modifier “corporeal” expresses the “differentia” or principle of division. The concept of corporeal substance is then further divided by introducing the differentia: “animate.” If such a scheme is in place, one can say simply that for a characteristic mark to be contained in a concept is for it to be the genus or differentia either of that concept itself, or of some concept bearing the ancestral of the relation “ x is the genus of y ” to that concept. Thus the concept “man” contains, in addition to the concepts “rational” and

²⁷ The needed quotation marks are missing from the original.

“animal,” the genus and differentia of “animal”—viz., “sensible” and “body,” as well as the genus and differentia of “body.”²⁸

So characterized, the notion of containment is clear and non-metaphorical. Or rather, it is *as* clear as the general notion of the relation of a genus or differentia to a species. But how are we to understand that relation? Tradition provides numerous *examples* of concepts related in this way, but the relation itself is not well explained. We can nonetheless attempt an explanation by appealing to the idea of an Aristotelian “essence.” We might say that a concept’s genus and differentia are those concepts that are mentioned in specifying the Aristotelian “essence” that belongs to anything falling under that concept, where the “essence” is what is stated in answering the question: “What is it?” That is some kind of advance, but it leaves the notions of “containment” and “a part of a concept” only as clear as the sense of this rather unclear question. If I point to a human being and ask “What is it?,” the intended Aristotelian answer is “a rational animal,” but the sense of the question does not by itself rule out the answer “a substance.” Consequently, the present explanation of containment risks failing to count “rational” as contained in the concept “man.” Of course, in practice the explanatory slack is taken up by the various examples provided by Aristotle and others—examples which familiarize us with the level of description intended. Nonetheless, when the examples give out the threat of unclarity returns.

To address this difficulty one might propose that in determining the extension of the “contained in” relation recourse should be had not to Aristotle’s theory of essences, but to the actual classificatory schemes developed by working scientists. Anderson himself seems to recommend such a strategy when he chooses to illustrate the idea of a logical division by appealing to examples from Linnaeus.²⁹ But such a manoeuvre raises a further difficulty. For the concept hierarchies now invoked will not in general be “logical divisions” in the strict sense of the term, for in some cases a concept instead of being simply bifurcated will have three or more concepts immediately contained under it. In the concept hierarchy based on ideas from Linnaeus’s (1735), for example, one finds six concepts immediately contained under “animal”: “quadruped,” “bird,” “amphibian,” “fish,” “insect,” and “worm.”³⁰ Each pair of these concepts is supposed to be mutually exclusive, yet it is hard to see how a negative judgment such as “No fish is an insect” could be analytic in the exclusion or contradiction senses. After all, according to the Linnaean scheme, the negation of “insect” is neither contained in nor identical with the concept “fish.”

²⁸ For further details see de Jong (1995, 623-7).

²⁹ See Anderson 2005, 29. Whether such examples do illustrate the traditional notion of a division is, however, questionable, since empirical classificatory schemes need not have the dichotomous structure of a division.

³⁰ For details see Anderson (2005, 29-30).

But perhaps the most pressing difficulty for Anderson's strategy of clarifying Kant's notion of containment concerns its lack of fit with Kant's view of analytic judgments as *a priori*. The problem is that our schemes of classification are not arrived at *a priori*. Careful observation together with considerations of elegance, fruitfulness, explanatory power, and so forth go into determining the correct classificatory scheme. If Anderson is right, it ought therefore to be an empirical question whether—in Kant's sense of the term—one concept “contains” another. Anderson recognizes this consequence of his interpretation and embraces it, arguing that Kant ought to have accepted revisable analyticities—and so, presumably, abandoned his view that analytic truths are *a priori*.³¹ But given the importance for Kant of conceptual analysis, which in his view, constitutes “perhaps the greatest part of the business of our reason” (A 5/B 9), it seems doubtful that he would have been prepared to take such a step. I conclude that Quine's charge that Kant's explanation of analyticity rests on unclear metaphor is, on balance, justified.

4. Judgments of clarification (explication) vs. judgments of amplification

Having characterized the analytic-synthetic distinction in terms of the containment-or-exclusion criterion, Kant immediately proceeds to suggest some alternative terminology. He says that one could also call analytic judgments “judgments of clarification and [synthetic judgments] judgments of amplification, since through the predicate the former do not add anything to the concept of the subject, but only break it up by means of analysis into its component concepts, which were already thought in it (though confusedly); while the latter, on the contrary, add to the concept of the subject a predicate that was not thought in it at all, and could not have been extracted through any analysis.” (A 7/B 11).

We have already noted that Kant focuses on true judgments in giving his first characterization of the distinction at A 6-7/B 10. It should now be observed, further, that the present characterization presupposes, in addition, that the judgments being classified are *known to be true*. For the explicative-ampliative contrast relates to the manner in which a judgment provides new knowledge of the subject. An analytic judgment is knowledge-extending—and, indeed, affords “real *a priori* knowledge” (A 6/B 10) insofar as it serves to render a concept more “distinct” by making explicit its implicitly contained marks. A synthetic judgment, by contrast, is knowledge-extending because it adds something to the concept of the subject that was not thought in it. To “add” something to the concept of the subject means, in this context, to add something to *our knowledge of the subject*. In a synthetic judgment one comes to know something about the subject that one could not

³¹ See A 6/B 10, A 7/B 11-12, A 154-B 194, and *Prolegomena*, §2 (Ak. 4: 267).

have learned just by understanding (or “thinking”) the subject-concept. An analytic judgment does not add anything because “I need only become conscious of the manifold I always think in [the subject-concept] in order to encounter [the predicate] therein.” (A 7/B 11). Kant’s talk of “encountering” the predicate clearly brings out the epistemic flavour of this characterization. A related expressly epistemic description occurs in the *Jäsche Logic*: “Synthetic propositions increase cognition materialiter, analytic ones merely formaliter” (Ak. 9: 111). Again, the emphasis of the contrast lies on the manner in which a judgment increases our knowledge.³² This last remark occurs as a note on a different, but still epistemic characterization: “Propositions whose *certainty* rests on *identity* of concepts (of the predicate with the notion of the subject) are called *analytic* propositions. Propositions whose truth is not grounded on identity of concepts must be called *synthetic*.” (Kant, loc. cit., first emphasis added, others in the original.).

The characterization in terms of the explicative-ampliative contrast contains both a negative point and a positive point. The negative point is that analytic judgments, by definition, do not afford knowledge of features of things not already represented as belonging to them by the subject-concept. The positive point is that they serve to “break up” a concept into its constituent characteristic marks, and so yield conceptual knowledge. The first claim is unexceptionable, but the second cannot be reconciled with Kant’s practice in the first *Critique*, and other works, of classifying explicitly identical judgments as analytic. Thus in both the first *Critique* (B 17) and the *Prolegomena* (Ak. 4: 269) the judgment “ $a=a$ ” is said to be analytic, while in the *Jäsche Logic* analytic judgments are said to include such explicit identities as “Man is man” (Ak. 9: 111). Obviously, since in these judgments there is no “breaking up” of a concept and no rendering contained marks distinct, they cannot be counted analytic according to the explicative-ampliative contrast. That conception is therefore in clear tension with the identity-or-contradiction conception. Later in his 1791 essay *What Real Progress has Metaphysics made in Germany since the Time of Leibniz and Wolff?*³³ Kant resolves the stand-off in favour of the explicative-ampliative contrast. Now the sense of “analytic” is narrowed so that it applies only to judgments in which there is a genuine analysis of a concept:

Judgments are *analytic*, we may say, if their predicate merely presents clearly (*explicite*) what was thought, albeit obscurely (*implicite*), in the concept of the subject; e.g., any body is extended. If we wanted to call such judgments identical, we should merely cause confusion; for judgments of that sort contribute nothing to the clarity of the concept which all judging must yet aim at, and are therefore called empty; e.g., any body is a bodily (or in other words mate-

³² The importance of this passage in illuminating the explicative-ampliative contrast has been emphasized by Henry Allison (1985, 33).

³³ Written in 1791, but published 1804—hereafter “*Progress*” (Ak. 20: 253-351).

rial) entity. Analytic judgments are indeed *founded* upon identity, and can be resolved into it, but they *are* not identical for they need to be dissected and thereby serve to elucidate the concept; whereas by identical judgments, on the other hand, *idem per idem*, nothing whatever would be elucidated. (Ak. 20: 322)³⁴

What explains this change of position? It is hard to say, but there is some reason to think that it is related to Kant's having come to regard the analytic-synthetic distinction as most centrally a classification of knowledge-advancing judgments as opposed to merely true judgments. Thus in his logic lectures Kant connects the rationale for withholding the epithets "analytic" and "synthetic" from explicitly identical judgments with their failure to *advance our knowledge*: "Propositions which explain *idem per idem* advance cognition neither analytically nor synthetically. They are tautological propositions. By them I have neither an increase in distinctness, nor a growth in cognition" (*Logik Busolt*, Ak. 24: 667). These facts suggest the following story: Kant first frames the analytic-synthetic distinction in the course of making an anti-Leibnizian point about truth: namely, there are some synthetic truths. For those purposes a classification of *true* judgments in terms of the identity-and-contradiction criterion suffices. Later, however, he wishes to make the further point that some scientific knowledge is synthetic *a priori*. For that purpose what is needed is a classification of judgments that advance knowledge. Accordingly, the ampliative-explicative contrast is introduced as a classification of judgments *known to be true*.

Evidence for this account of events is suggested by one of Kant's notes in Meier's 1752 *Auszug aus der Vernunftlehre* (Meier, 1914): "All analytic judgments are universal, *synthetic [judgments] are empirical and particular*" (R. 3083, Ak. 16: emphasis added). One cannot be certain whether "empirical" here means the same as "a posteriori," but since strict universality is a criterion of *a prioricity* (B 4), and since synthetic judgments are characterized here as particular, it seems likely that Kant regards them as *a posteriori*. If that is right, this would be some clear evidence that Kant had formulated the analytic-synthetic distinction even before arriving at his belief in *a priori* synthetic judgments.

The characterization in terms of the explicative-ampliative contrast is a classification of items of knowledge. It is also a characterization *in epistemic terms*, for it tacitly contains a reference to how the truth of a judgment may be known—i.e., through analysis in the case of analytic judgments, but only in their case. It is usual to suppose that an epistemic characterization of the distinction occurs only much later in the first *Critique* when Kant discusses the so-called "principle of contradiction criterion." I shall argue, however, that that is not in fact a characterization of analyticity at all.

³⁴ Notice that Kant's use of "identical" has narrowed along with his use of "analytic": an identical judgment is now just an explicitly identical judgment.

5. The (so-called) “Principle of Contradiction Criterion”

What is usually taken to be the most widely applicable of Kant’s characterizations of analyticity, the so-called “principle of contradiction criterion,” is contained in a section of the first *Critique* entitled “On the supreme principle of all analytic judgments.” Kant says: “If the judgment is analytic, whether it be negative or affirmative, its truth must always be able to be cognized sufficiently in accordance with the principle of contradiction.” (A 151/B 190-1). One point about this remark that is rarely noted is that it is *not* on its face a *characterization* of analyticity.³⁵ Kant does not say—or even imply—that analyticity consists in being knowable on the basis of the principle of contradiction. Instead, he states a necessary condition for analyticity: *if* something is an analytic judgment then it must be knowable (or “cognizable”) in a certain way. Moreover, the surrounding texts suggest that the main point of this remark is not to characterize the notion of analyticity but rather to describe the various ways in which the principle of contradiction may be legitimately employed. Having remarked that there is a negative use of this principle—a way of telling that a judgment is false—Kant continues:

But one can also make a positive use of it, i.e. not merely to ban falsehood and error (insofar as it rests on contradiction), but also to cognize truth. For, **if the judgment is analytic**, whether it be negative or affirmative, its truth must always be able to be cognized sufficiently in accordance with the principle of contradiction. ...Hence we must be able to allow the **principle of contradiction** to count as the universal and completely sufficient **principle of all analytic cognition**; but its authority and usefulness does not extend beyond this, as a sufficient condition of truth....Since we now really have to do only with the synthetic part of our cognition, we will, to be sure, always be careful not to act contrary to this inviolable principle, but we cannot expect any advice from it in regard to this sort of cognition. (A 151/B 190)

Kant is saying that the principle of contradiction serves as a negative criterion of truth in general—nothing can be true if it contains a contradiction—and that it serves, in addition, as a positive criterion of truth for *analytic* judgments (we’ll see how shortly), but *not* as a positive criterion for truth *simpliciter*. A “criterion of truth” here means a principle that affords a way of telling that other propositions are true. Kant is thus making a point about the epistemology of analytic and synthetic judgments, and in doing so he is *pre-supposing* an understanding of the terms “analytic” and “synthetic.” He cannot therefore mean to be simultaneously *characterizing* analytic judgments as those that are cognizable in accordance with the principle of contradiction.³⁶

³⁵ This point has been noted by de Jong (1995). The observation is astute but, possibly because de Jong does not support it by any very extensive argumentation, it has not been absorbed into the subsequent Kant literature. See, for example, van Cleve (1999, 20) and Hanna (2001, 146).

³⁶ Similarly, Kant’s brief mention of the principle of contradiction at A 7/B12 is made in the course of justifying the claim that “a body is extended” is an *a priori* judgment. Again,

The same observation is equally valid in connection with the *Prolegomena*'s discussion of the relation between the principle of contradiction and analytic judgments. In section 2(a) of that work—a section entitled “On the distinction between synthetic and analytic judgments in general,” Kant introduces the distinction by appealing to the explicative-ampliative contrast. Once this characterization is in place he proceeds in section 2(b) to advance (and defend) the claim that: “All analytic judgments rest entirely on the principle of contradiction and are by their nature *a priori* cognitions, whether the concepts that serve for their material be empirical or not.” (Ak. 4: 267). Again, on its face this is a claim *about* analytic judgments, not a characterization of them. In the next section—2(c)—Kant goes on to argue that synthetic judgments “require a principle other than the principle of contradiction,” thus echoing his remarks in the first *Critique*.³⁷

It should be noted, further, that when discussing the principle of contradiction both in the first *Critique* and in the *Prolegomena* Kant makes no remark restricting attention to subject-predicate judgments. This omission is usually viewed as a sign that he means to be relaxing the containment criterion's restriction to subject-predicate judgments in order to obtain a distinction that applies to judgments in general. However, on that assumption it is hard to understand why the principle of contradiction should be formulated in a way so obviously tailored to subject-predicate judgments. It runs: “No predicate pertains to a thing that contradicts it” (A 151/B 190), and similar formulations occur elsewhere.³⁸ The picture is thus not one according to which an analytic judgment is “cognized in accordance with the principle of contradiction” by deriving an explicit contradiction from its negation, for the contradiction in question is not one that holds between judgments, but only predicates. A better explanation of the absence of any restriction to subject-predicate judgments, I would claim, is that Kant is not now attempting to *characterize* analytic judgments at all, but rather just saying something about their epistemic status. He is saying that any judgment, if analytic, “rests” on the principle of contradiction in the sense that knowledge of its truth rests on knowledge of this *a priori* principle, with the consequence that it is, in turn, itself *a priori*.³⁹

there is nothing about it that would suggest Kant means to be *characterizing* analytic judgments as those that are cognizable in accordance with the principle of contradiction.
37 Similar remarks apply to Kant's discussion of the distinction in *Progress* (See Ak. 20: 323).

38 Kant's metaphysics lectures contain a more precise formulation: “To no subject does there belong a predicate opposed to it” (*Metaphysik Mrongovius*, Ak. 29: 789).

39 This is not to deny that one might use the notion of being a subject-predicate judgment that is knowable in accordance with the principle of contradiction as a way of demarcating the analytic judgments, it is just to deny that Kant uses it this way in the first *Critique*.

6. The “supreme principle” of analytic judgments

So far we have been concentrating on the principle of contradiction in its role as the fundamental epistemic grounding principle of analytic truths. But it is clear that Kant also takes the principle of identity to play a role in grounding analytic truths (*Progress*, Ak. 20: 322). This principle is traditionally formulated in the rather arid form: “whatever is, is,” but Kant also offers a more helpful formulation: “Whenever an identity between the concepts of the subject and the predicate is discovered, the proposition is true.” (1:389). As this formulation makes clear, the principle’s practical utility derives from the fact that it states a connection between the structure of a judgment and its truth-value.

One might naturally think of the principles of contradiction and identity as dividing the work of grounding analytic truths equally between them. And this would have been a natural thought for Kant to have. In his 1764 *Inquiry concerning the distinctness of the principles of natural theology and morality*—a work written at a time when Kant was still a Leibnizian about truth—he describes the “law of identity” as the “supreme formula” of all affirmative judgments and the “law of contradiction” as the “fundamental formula” of negative judgments (Ak. 2: 298). He adds that: “Most people have made the mistake of supposing that the law of contradiction is the principle of all truths whatever, whereas it is only the principle of negative truths.” (Ak. 2: 294). After rejecting the Leibnizian account of truth, however, Kant comes to see the principle of contradiction as enjoying a kind of preeminence. As we have seen, in the first *Critique* he describes it as the “supreme principle of all analytic judgments” (A 150 /B189). And in some lecture notes written between the two editions of the first *Critique* he suggests that it can be thought to ground *both* affirmative and negative analytic judgments: “[A]ll analytic judgments, affirmative as well as negative, stand under the principle of contradiction.” (*Metaphysik Mrongovius*, Ak. 29: 789). Why did Kant come to see the principle of contradiction as preeminent in this way?

One initially attractive answer can be ruled out as unlikely. It is doubtful that Kant could have come to regard the principle of contradiction as “supreme” as a result of supposing that the principle of identity could be derived from it. For in some lecture notes from 1794-5 he criticizes Baumgarten’s attempt in section 11 of his *Metaphysica* to give just such a demonstration. Kant argues that the proof cannot be carried out because the principle of contradiction already “exhibits” the principle of identity, so that the latter is in effect “being proved through itself.”⁴⁰ Clearly, for Kant the two principles are too intimately connected for one to be provable from the

⁴⁰ *Metaphysik Vigilantius* (K₃) Ak. 29: 964). Similarly, in metaphysics lectures from the early 1790s Kant says that the principle of identity is “already conceived in” the principle of contradiction. *Metaphysics* L2 (Ak. 28: 544); cf. *Metaphysics* K3. (Ak. 29: 964).

other in any sense of “proof” that involves assigning them different positions in the order of knowledge.⁴¹ Indeed, Kant seems to have conceived of the two principles as merely different aspects or formulations of one and the same fundamental principle: “The principle of identity enunciates positively what the principle of contradiction enunciates negatively.” (*Metaphysik Mrongovius*, Ak. 29: 791). This idea is further supported by Kant’s habit of speaking of just one “principle of contradiction *and* of identity” (*Jäsche Logic*, Ak. 9: 52-53, emphasis added), and in other places of one “principle of identity *or* contradiction” (Ak. 8: 245, emphasis added).

Nor would it have been idiosyncratic of Kant to view these two principles as intimately connected: before him Leibniz had viewed them as identical. In his work *Thoughts on the general parts of Descartes’ Principles*, Leibniz says: “Of the truths of reason, the first is the principle of contradiction or, what comes to the same thing, of identity.” (Leibniz, 1875-90, vol. 4, 357). While in his work *On the Essay on Human Understanding by Mr Locke*, he says: “My view is therefore, that one should take for a primitive principle nothing but experiences and the axiom of identity, or (what is the same thing) the principle of contradiction.” (Leibniz, 1875-90, vol. 5, 14). Finally, in his correspondence with Clarke, he says: “The great foundation of mathematics is the *principle of contradiction or identity*, that is, that a proposition cannot be true and false at the same time and that therefore *A is A and cannot be non-A*.” (Leibniz, 1875-90, vol. 7, 355).⁴²

But if what Kant refers to as “the principle of contradiction” in the first *Critique* is really the Leibnizian double-aspect “principle of contradiction-or-identity,” why does he nonetheless accord pride of place to the “principle of contradiction” *formulation* of this hybrid principle? Part of the answer seems to be that that formulation enjoys a wider practical applicability. This point emerges from Kant’s explanation of why both analytic and synthetic judgments stand under the principle of contradiction. The passage from the *Metaphysik Mrongovius*, where Kant makes this claim, continues: “When a predicate is identical with the subject, then its opposite contradicts the subject, and I will cognize the falsity [of the judgment’s contradictory] at once by the

⁴¹ That the principle of identity should not in Kant’s view be derivable from the principle of contradiction is also suggested by the more general consideration that Kant understands a “principle” as a truth that is not grounded in any other truth. Thus in the *Hechsel Logic* he says: “[Principles] are called principles because they are not grounded in turn in others but instead provide the ground for others.” (Kant 1992, 381-382).

⁴² Kant was familiar with the Leibniz—Wolffian tradition of treating the two principles as amounting to a single “twin” principle. In his *New Elucidation* of 1755, while still a Leibnizian about truth, Kant had identified “two absolutely first principles of all truths. One of them is the principle of affirmative truths, namely the proposition: whatever is, is; the other is the principle of negative truths, namely the proposition: whatever is not, is not.” He adds: “These two principles taken together are commonly called the principle of identity.” (Ak. 1: 389).

principle of contradiction when I cognize the truth [of the judgment] through the principle of identity;" (*Metaphysik Mrongovius*, Ak. 29: 789). So, for example, the affirmative (true) analytic judgment "Every $F G$ is G " can be said to "stand under" the principle of contradiction because I can cognize its truth (by the principle of identity) when I cognize the falsity of its "opposite," (i.e., its contradictory⁴³)—"Some $F G$ is not G "—by the principle of contradiction.⁴⁴ Crucially, however, one cannot say, symmetrically, that a negative (true) analytic judgment stands under the principle of identity in virtue of my ability to cognize its truth by the principle of contradiction when I cognize the falsity of its opposite by the principle of identity. For although the judgment "No $F G$ is not G ," for example, is cognizable by the principle of contradiction, its contradictory "Some $F G$ is not G ," cannot be cognized by the principle of identity. This asymmetry gives the principle of contradiction a kind of priority over the principle of identity: each principle is equally basic, but the principle of contradiction serves to ground more judgments than its sister principle.

A second possible reason why Kant should have elected to give pride of place to the principle of contradiction formulation of the "principle of identity-or-contradiction" is that only that formulation is able to bring out an important aspect of analytic judgments, namely, their "apodictic," or "necessary" character. This idea is expressed particularly clearly in some metaphysics lectures from the mid 1790s:

[The principle of contradiction and the principle of identity] are the two highest formal principles of our cognitions, nevertheless the principle of contradiction is used more than the principle of identity. That happens because necessity lies in the principle of contradiction, which forces the truth of that which is to be proved. The proof of a truth through this, that its opposite is impossible, is indirect, but it is apodictic and connected with the concept of necessity, whereas the mere truth alone does not convey that impression with it, however the principle of identity is always understood along with [the principle of contradiction]. (*Metaphysik Vigilantius*, K3, 29: 964-5).

The necessity of an analytic judgment, then, is brought out by observing that its opposite is impossible.⁴⁵ This same idea appears, less explicitly, in the first *Critique* itself: "[In an analytic judgment] before I go to experience, I already have all the conditions for my judgment in the concept, from which I

⁴³ By the "opposite" of a judgment Kant means a judgment opposed in both quantity and quality, hence a contradictory, according to the doctrine enshrined in the medieval "Square of Opposition."

⁴⁴ Note that one uses the principle as a positive criterion of truth in cognizing the truth of "Every $F G$ is G ," but merely as a negative criterion of truth in cognizing the falsity of "Some $F G$ is G ."

⁴⁵ The idea that necessity is brought out by the impossibility of the "opposite", is suggested also by the third quotation from Leibniz: "A is A and cannot be not-A" (emphasis added). (Here the opposite is only the opposite in quality, not also quantity.) I am indebted to Peter Railton for this observation.

merely draw out the predicate in accordance with the principle of contradiction, *and can thereby at the same time become conscious of the necessity of the judgment.*” (A 7/B 12, emphasis added; cf. A 595/B 623).⁴⁶ Kant presents the principle of contradiction formulation as the “supreme principle” of analytic judgments because when this formulation is used in a demonstration of the truth of an analytic judgment, the judgment is thereby displayed not just as true but as necessarily true. It should be borne in mind that for Kant the modal status of judgments is “a quite special function of them, which is distinctive in that it contributes nothing to the content of the judgment ... but rather concerns only the value of the copula in relation to thinking in general.” (A 74/B 99-100). One way of understanding this idea is to suppose that what is apodictic, assertoric, or possible, is in the first instance not the judgment itself, but rather the judgment insofar as it is known in a certain way. A judgment can be known with or without the consciousness that it cannot be otherwise. When an analytic judgment is known on the basis of the principle of contradiction-or-identity *in its formulation as the principle of contradiction*, it is known with that consciousness, but when it is known on the basis of this same principle in its guise as the principle of identity it is known without that consciousness. When Kant speaks—as he often does—of a judgment as “apodictic” or “necessary” without relativization to a way in which it is known, we can take him to mean that there is at least one way of knowing the judgment with the consciousness that it cannot be otherwise.

7. Conclusion

Analytic truths, on Kant’s most expansive understanding of them, may be classified according to two distinctions which cut across each other. They may involve a full or partial identity of concepts (or, in the case of negative judgments, a full or partial contradiction between them), and this identity (or contradiction) may be implicit or explicit. The first *Critique* contains examples of analytic judgments in each of the four categories thus created.⁴⁷

[A] Explicit, full identities/contradictions: e.g., “ $a=a$ ”⁴⁸ (B 17).

[B] Explicit, partial identities/contradictions: e.g., “No unlearned person is learned” (A 153/B 192)

[C] Implicit, full identities/contradictions: e.g., the apperception principle (B 131-2).⁴⁹

⁴⁶ Cf. *Prolegomena*, Ak. 4: 268.

⁴⁷ I am grateful to an anonymous referee for suggesting this useful classification.

⁴⁸ As Robert Hanna has made clear, the intended substitution instance of the variable “ a ” is a name of a concept (Hanna 2001, 142). So the example from the *Jäsche Logic* “Man is man” would be a substitution instance of this schema.

⁴⁹ The apperception principle is stated as the claim that: “The I think must be able to accompany all my representations” (B 131-2). Kant twice calls it “analytic” and once an “identical proposition” (B 135, B 138. Cf. B 407-8). The achievement implicit in the *I think’s* coming to accompany one of my representations is my becoming aware that I am thinking that representation, and not merely my coming to entertain the thought that I am

[D] Implicit, partial identities/ contradictions: e.g., “All bodies are extended” (A 7/B11).

The only characterization that counts judgments in all four classes analytic is the identity-and-contradiction characterization. The other two characterizations, strictly speaking, recognize as analytic only judgments in category [D]—or, perhaps, in the case of containment-and-exclusion, [C] and [D]⁵⁰—since they each involve the idea that any analytic judgment is in some way elucidatory. For this reason, if for no other, the identity-and-contradiction characterization must be recognized as the most central and fundamental conception of analyticity in the first *Critique*. Nonetheless, it is clear that Kant’s thoughts about analyticity were already in flux in that work, since the other characterizations clearly emphasize the elucidatory role of analytic judgments. The idea that an analytic judgment is by its very nature elucidatory was to become firmly entrenched by the *Progress* (composed in 1791), but it is arguably already to the fore in the *Prolegomena*, where the explicative-ampliative contrast takes over as Kant’s official characterization of analyticity. Because Kant’s various characterizations in the first *Critique* do not even agree on which judgments are to be counted analytic, we must conclude that there is a tension in his conception of analyticity in that work—one which persists into the *Jäsche Logic*. We have seen, however, that that tension is not the one usually attributed to Kant between the (alleged) principle of contradiction conception and the containment conception.

I have argued that Kant settled for a non-exhaustive classification of judgments. Some commentators have found this idea hard to accept. Their desire to find an exhaustive classification in the first *Critique* has inclined them toward reading Kant’s discussion of the principle of contradiction at A 151/B 190-1 as containing a further characterization of analyticity in epistemic terms. Interestingly, however, such a tradition of interpretation does not

thinking it. Thus the principle can be taken to mean simply: “Every representation of mine is such that I can become aware that I think it.” So construed, the principle makes plain that the concept of being a representation of mine just *is* the concept of being such that I can become aware that I think it. The principle is not implicitly of the form “Every *AB* is *B*” but rather implicitly of the form “Every *A* is *A*.” The identity is only revealed when one comes to see that “...is a representation of mine” expresses the same judgmental constituent as “...is a representation of which I can become aware that I think it.” Thus in the judgment that constitutes the apperception principle there is no breaking up the subject-concept into its component marks, but rather just a re-presentation of the subject-concept under another guise.

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The apperception principle has a claim to be thought “elucidatory” because it makes one more conscious of a concept—and so makes the concept “clearer”—even if doesn’t make its parts better known—i.e., even if it doesn’t make the concept more “distinct.” So, if we treat identity of concepts as a limiting case of “containment,” it might be thought to qualify as analytic according to the containment-or-exclusion criterion. However, such a judgment does not “break up” a concept into its component parts, so it is not, strictly speaking, “explicative.” (For a helpful discussion of the distinction between “clear” and “distinct” cognitions in Kant see de Jong (1995, 620-623).)

appear to have originated in serious Kant scholarship. No trace of it can be found, for example, either in Hans Vaihinger's magisterial, *Commentar zu Kant's Kritik der Reinen Vernunft* (1881, 1892)—a work which takes careful account of much of the secondary literature that precedes it, or in Norman Kemp Smith's voluminous First World War-era commentary ([1918] 1992). It is, however, clearly present in A. J. Ayer's 1936 *Language, Truth and Logic* (1980, 104), and the most likely source for Ayer's reading would seem to be Frege's 1884 *Grundlagen der Arithmetik* (1934). Frege remarks that "Kant obviously—as a result, no doubt, of defining them too narrowly—underestimated the value of analytic judgments, though it seems that he did have some inkling of the wider sense in which I have used the term." (ibid., §88). That wider sense is one according to which a judgment is analytic just in case the primitive truths lying at the basis of its proof include only general logical laws and definitions (ibid., §3). One would expect Frege to cite as the textual basis for his interpretation either B 12 or A 151/B 190, but he mentions neither text. Instead, he offers a footnote paraphrasing Kant's remark at B 14 to the effect that "a synthetic proposition can of course be comprehended in accordance with the principle of contradiction, but only insofar as another synthetic proposition is presupposed from which it can be deduced, never in itself." That point, however, relates to the limitations of the principle of contradiction, and does not suggest a rival definition of analyticity. Ironically, then, if Frege did inaugurate the tradition of reading A 151/B 190 as containing a definition (or criterion or characterization) of analytic truth, it was not on the basis of any explicit discussion of that passage.

One question remains: why should it have mattered so little to Kant to have a classification of judgments in general? The answer would seem to be that Kant's chief concern is to argue for the *syntheticity* of certain judgments that in his day would have been assumed to have subject-predicate form. The need for a classification that applies to all judgments is very much a late nineteenth and early twentieth-century concern. Frege required such a classification because he wished to argue that certain judgments that for him were palpably not of subject-predicate form (i.e., the judgments of arithmetic) were—to put the point in terms neutral between Kant and Frege—grounded in pure reason alone. But Frege's purposes were not Kant's, and our efforts to understand the Critical Philosophy will only be hampered if we fail to keep this point in mind.⁵¹

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