

## The Conditioned Formalism of General Logic in the "Critique of Pure Reason"

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THE *CRITIQUE OF PURE REASON* contains two logics: one containing a priori rules governing the relation of our thought to content, the other specifying the a priori laws of thought with regard to its form alone. For those moved by Quine's attack on the dichotomy between form and content, the challenge to Kant might be formulated in terms of whether his distinction between these two logics can in fact be maintained. Is it the doctrine of the first *Critique*, for example, that logical relations among concepts may be determined purely formally, independently of an investigation into their relation to content or of a determination of background metaphysical assumptions governing their application? Can we, in other words, establish the logical form and fitness of a judgment prior to or in the absence of reflection on the nature of the objects to which its concepts are taken to refer?

Drawing his inspiration perhaps more from Hegel than from Quine, German philosopher Michael Wolff has pointed to passages in the *Critique of Pure Reason* which he thinks reveal Kant's tacit acknowledgment of tensions in his own form/content distinction.<sup>1</sup> General logic, on this interpretation, cannot determine the logical form of our judgments in the absence of assumptions about content. As Kant himself is supposed to have recognized, according to Wolff, general logic cannot fulfill its role as a self-sufficient canon of pure reason.<sup>2</sup> It therefore loses its status of priority and independence in relation to transcendental logic. Its formalism is conditioned by metaphysical or material assumptions, and this, Wolff claims, undermines the dualistic basis of Kant's idealism.<sup>3</sup>

As my title suggests, I think there is reason to doubt that general logic is self-

<sup>1</sup>Wolff relies most heavily on the Antinomy and Amphiboly chapters of the first *Critique*, and I discuss his treatment of them below. See his article "Der Begriff des Widerspruchs in der 'Kritik der reinen Vernunft': Zum Verhältnis von formaler und transzendentaler Logik," in *Probleme der 'Kritik der reinen Vernunft': Kant-Tagung Marburg 1981*, ed. Burkhard Tuschling (Berlin: Walter de Gruyter, 1984). Topics in this article are covered more extensively in his study, *Der Begriff des Widerspruchs: Eine Studie zur Dialektik Kants und Hegels* (Königstein/Ts.: Hain, 1981). Wolff draws attention to similarities in the Hegelian and the Quinian critiques of the form/content dichotomy, as does Burkhard Tuschling in "Sind die Urteile der Logik vielleicht 'ingesamt synthetisch'?" *Kant-Studien* 72 (1981), 304-35.

<sup>2</sup>Wolff puts the point as follows: "Wenn man seine Argumentation . . . genau analysiert, sieht man, daß Kant zwar meint und ausspricht, daß die formale Logik ein Kanon sei— . . . , andererseits aber in seiner eigenen Argumentationsweise zu erkennen gibt, daß die formale Logik ihre kanonische Funktion nicht immer wahrnehmen kann." *Probleme der 'Kritik der reinen Vernunft'*, p. 214.

<sup>3</sup>For both Wolff and Tuschling (in the works cited above) the fact that general logic cannot fulfill its role as a canon furthermore suggests the preferability of Hegel's form of idealism.

or logical fitness alone. Furthermore, as is clear from the above, its concern is not with the origin of our representations. It "abstracts" from whether they are given "a priori in ourselves, or only empirically. . . ."

Kant seems to suggest that from the standpoint of general logic we can determine the logical form of a judgment in absence of any consideration of the kind of object, sensible or intelligible, to which its concepts refer. The rules of general logic, he says, "must be applied in the examination and appraising of the form of all knowledge *before we proceed to determine* whether their content contains positive truth in respect to their object" (A60/B84, my emphasis). General logic would therefore appear to be self-sufficient when it comes to determining logical form, and not in need of any material or transcendental logic to carry out its task successfully. Various passages in the *Critique* appear to support this interpretation. In the Discipline of Pure Reason Kant tells us that we can judge a concept "analytically," or investigate "what is actually contained in it," apart from determining whether it is instantiated in pure or empirical intuition (A721/B749). In the Postulates of Empirical Thought he describes concepts as "complete" in themselves, in abstraction from their modality. Attaching modality to a concept as a predicate does not in the least enlarge that concept, he says; the categories of modality "only express the relation of the concept to the faculty of knowledge." "Even when the concept of the thing is quite complete," he continues, "I can still enquire whether this object is merely possible or is also actual, or if actual, whether it is not also necessary. No additional determinations are thereby thought in the object itself. . . ." (A219/B266).<sup>5</sup>

## II

As noted above, it is Michael Wolff's view that this conception of general logic is incompatible with other key arguments of the first *Critique*. What Kant's

<sup>5</sup>It is true that the modalities Kant considers here refer to "empirical thought" or condition our thought of appearances, while I am concerned with the question of whether or to what extent the content of a concept is determined by its being *either* empirical or non-empirical. Kant's point in this passage could be read to imply that the modalities of appearances do not in any way add to the content of our concepts (a reading that I challenge below). Presumably he would draw the same line between a concept's content and its modality even were its modality (from the standpoint of empirical thought) that of impossibility.

In "Der Begriff des Widerspruchs," pp. 194ff., Wolff criticizes Kant for assuming that concepts are complete in themselves or have an already given content independent of their object-reference. According to Wolff this doctrine contradicts Kant's own definition of judgment. As Kant points out at A68f./B93f., it is in the context of judgments that concepts first come to be. In the context of judgments, furthermore, concepts stand in relation to objects. It is only in the unity of a judgment, Wolff contends, that we get a distinction between concept and object.

Similar worries are expressed by Norman Kemp Smith in his *Commentary to Kant's "Critique of Pure Reason,"* 3rd ed. (Atlantic Highlands: Humanities Press, 1984). In the pages of Kant's Amphiboly and his Postulates of Empirical Thought, Smith, like Wolff, discovers traces of the view that concepts have a nature that is determined by intrinsic factors alone—independently, that is to say, of their relations to other concepts in judgments and independently of their modality. According to Smith this is evidence that Kant has not left Leibnizian rationalism entirely behind. (See pp. 181f., 394f., 418.)

I think that both Wolff and Smith impute to Kant a greater gap between concepts and their object-reference than is warranted, but this remains to be argued in what follows.

This same message seems to be conveyed in Kant's analysis of transcendental amphiboly. Because Leibniz restricted himself to a merely "logical" form of reflection, he made the mistake, on Kant's view, of confounding objects of pure understanding with appearances. In so doing he incorrectly identified logical relations.<sup>8</sup> Because, in Kant's words, Leibniz "compared the objects of the senses with each other merely in regard to understanding, taking them as things in general," it "inevitably followed," for example, "that he should extend his principle of the identity of indiscernibles, which is valid only of concepts of things in general, to cover also the objects of the senses . . . , and that he should believe that in so doing he had advanced our knowledge of nature in no small degree" (A271f./B327f.). If one drop of water in all its "internal determinations" is identical with another, then from the point of view of pure understanding, on Kant's account, they are indeed identical. But, he continues, "if the drop is an appearance in space, it has its location not only in understanding (under concepts) but in sensible outer intuition (in space), and the physical locations are there quite indifferent to the inner determinations of the things" (A272/B328). Had Leibniz, in other words, introduced into his investigations a "transcendental" form of reflection which takes into consideration the "transcendental location" of concepts (whether they belong to the faculty of pure understanding or to sensibility), he would not have judged it appropriate to assign identity to objects of the senses on the basis of the "inner determinations" of their concepts alone.

### III

If these arguments are supposed to undermine Kant's conception of general logic and his distinction between logical and transcendental reflection, as Wolff contends, it is difficult to see just how. The point of the Antinomy and Amphiboly chapters—that reflection on the origin of our concepts may require revisions in our assessment of logical relations—certainly seems to cause Kant no embarrassment. On the contrary, he heralds this discovery as one of the key insights of his Critical philosophy. In providing the solution to the antinomies, it allows him to guard against the "euthanasia of pure reason" and secure "indirect proof" of the truth of transcendental idealism (A407/B434, A506/B534). As the means of identifying transcendental amphiboly, it makes possible his critique of the dogmatic metaphysics of Leibniz. Nowhere in the first *Critique* do we find evidence of any concern that the nature of general logic as outlined in its opening pages is compromised as a result.

If we look more closely at the way in which Kant distinguishes general from transcendental logic there as well as in his 1782 lectures on logic, I think we can discover why this is so. When he argues in the Amphiboly and Antinomy chapters

<sup>8</sup>On Kant's view (A270/B326) Leibniz "compared all things with each other by means of concepts alone, and naturally found no other differences save those only through which the understanding distinguishes its pure concepts from one another. The conditions of sensible intuition, which carry with them their own differences, he did not regard as original, sensibility being for him only a confused mode of representation, and not a separate source of representations." It was Leibniz's failure to acknowledge sensibility as an "original" source of representations that then caused him to commit "transcendental amphiboly": "a confounding of an object of pure understanding with appearance."

For this reason and contrary to what Kant repeatedly seems to suggest, on Wolff's view, there can be no such thing as a "purely logical" form of reflection.<sup>9</sup>

At least on one interpretation of it, this argument misrepresents the distinction between logical and transcendental reflection in Kant. Transcendental reflection determines whether our concepts have content—whether they are "really" as well as merely "logically" possible. But this is not the function of a logical comparison of concepts. Comparing two concepts to determine their identity or opposition from the standpoint of mere form is a matter of comparing their constituent elements or partial concepts. If predicate-concept B is intensionally contained as a constituent element or mark of subject-concept A, B is for Kant an analytic predicate of A and the judgment which unites A and B is an analytic judgment. Its negation is self-contradictory. If it happens that all of the constituent elements of A are contained in B and vice versa, the two concepts are then identical. If predicate-concept B is not contained or "thought in" subject-concept A, the negation of the judgment does not produce a contradiction and the relation between the two concepts is synthetic (A718/B746). Finally, concepts A and B are "opposed" if the constituent elements of one contradict the constituent elements of the other.<sup>10</sup>

What needs to be shown, against the above reading of Wolff's critique, is that there is nothing about Kant's treatment of antinomy or amphiboly that calls into question this characterization of the function of logical reflection. As I have just noted, Wolff draws from Kant's treatment the moral that any determination of logical relations among concepts must presuppose assumptions about the kind of object, pure or empirical, to which the concepts refer. In this way, he implies, metaphysics becomes a constitutive feature of logical analysis. He then seems to go on to conclude, however, that Kant is therefore mistaken in describing the procedure of logical comparison as taking "no account whatsoever of the faculty of knowledge to which the given representations belong . . ." (A262/B318).

Perhaps another example can help clarify this objection. We know that in defense of his identification of the judgment "Every event has a cause" as synthetic, Kant says that the concept "event" on his understanding does not necessarily contain as part of its intensional content the concept "has a cause." In agreement with Hume he claims that we can think of an uncaused event

<sup>9</sup>In the discussion following his paper in *Probleme der 'Kritik der reinen Vernunft,'* Wolff puts his point this way: "Kant setzt voraus, daß man einem Begriff unabhängig von seinem Gegenstandsbezug ansehen kann, ob er logisch Mögliches zum Inhalt hat oder nicht. . . . Diese Voraussetzung ist mit einer anderen Voraussetzung Kants verwandt, der Voraussetzung, daß man zwei Begriffen unabhängig von ihrem Gegenstandsbezug ansehen kann, ob einer den anderen analytisch enthält oder nicht. . . . Kant selber belehrt uns durch seine transzendente Dialektik, daß es unrichtig ist, logische Beziehungen . . . zwischen bloßen Begriffen unabhängig von Gegenstandsbezug anzunehmen. Dann aber macht es auch Schwierigkeiten, von der logischen Möglichkeit eines bloßen Begriffs zu sprechen" (p. 215). I think Wolff is mistaken to claim that, according to Kant, we can determine the logical relations of concepts independently of their "Gegenstandsbezug" and I defend this thesis in what follows.

<sup>10</sup>See Kant's discussions in the Introduction of the *Critique of Pure Reason* (esp. Section IV) and in his 1782 lectures on logic (ed. Jäsche, 1800), esp. §§7, 36. At §36 Kant says that "Analytische Sätze heißen solche, deren Gewißheit auf Identität der Begriffe . . . beruht.—Sätze, deren Wahrheit sich nicht auf Identität der Begriffe gründet, müssen synthetische genannt werden." See also Lewis White Beck's helpful elucidation of these points in "Can Synthetic Judgments Be Made Analytic?" in his collection *Studies in the Philosophy of Kant* (Westport: Bobbs-Merrill, 1965), pp. 74–91.

## IV

I have so far interpreted Wolff's case against Kant in the following way. The conversion of logical relations in the Antinomy and Amphiboly demonstrates that there can be no such thing as a purely logical form of reflection because these arguments make clear the relevance of modality in any logical comparison of concepts or judgments. On this version of Wolff's critique, general logic "abstracts from content" in the sense that, on Kant's conception, it is supposed to be *indifferent* to the modal status of our concepts.<sup>13</sup> What I have urged in the above discussion, however, is that when Kant claims that modality does nothing to enlarge a concept, his point is not that modality is *irrelevant* to the determination of logical relations but that the determination of a concept's modality in its empirical employment is *more than a purely conceptual affair*. To believe otherwise is, as we have seen, to follow Leibniz in inferring from the inner determinations of concepts the real relations of things.

For Kant, of course, we learn whether a concept is "really" as opposed to merely "logically" possible by introducing into our inquiry a specifically transcendental form of reflection. If a concept is a "real" predicate, a real determination of some thing, its relation to its object in a judgment will be synthetic—not an expression of the object's logical essence or conceptual content but of features met with in intuition.<sup>14</sup> If a synthetic judgment is necessary, it is so either because, as in the case of mathematical principles, the connection between the subject and the predicate-concept may be demonstrated a priori via the construction of the subject-concept in pure intuition or because, as in the case of the a priori principles of possible experience, the connection between subject and predicate must obtain as a formal condition of the possibility of our representation of objects in empirical intuition. If a synthetic judgment is contingent, the connection of its concepts is, on Kant's view, discoverable a posteriori in some actual perception. In all cases the relation between the subject and predicate of synthetic judgments is not determined via an analysis of their meaning but is a function of their connection in either pure or empirical intuition. Kant's account of syntheticity or of real possibility is in this way an expression of his commitment

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appeals to in determining analyticity. Kant's "logical criterion" of analyticity, he tells us, consists in the conformity of a judgment to the law of contradiction; the "phenomenological criterion" consists in the determination that the predicate-concept is "really thought in the concept of the subject" (pp. 78ff.). Since both criteria require an inspection of the meaning of our concepts and since in Beck's words "formal logic abstracts from the meaning of all terms," we cannot on his interpretation distinguish analytic from synthetic judgments in the context of Kant's general logic (p. 81).

It is unclear to me how we are to interpret Beck's claim that "formal logic abstracts from the meaning of all terms." Kant characterizes general logic as abstracting not from "meaning" but from "content" (*Inhalt*); and I have suggested that he does not think that the fact that general logic abstracts from content interferes in any way with its function (via the *Reflexionsbegriffe*) in determining relations among concepts, including relations of identity and difference.

<sup>13</sup>I do not mean to suggest here that Wolff imputes to Kant the view that logical reflection cannot concern itself with the possibility, actuality, or necessity of concepts. Wolff's point, I believe, is rather that on Kant's conception we can determine logical relations of concepts independently of any consideration of whether they are "really" versus merely "logically" possible. General logic is indifferent to the modal status of our concepts, Wolff thinks, only in *this* sense.

<sup>14</sup>See Kant's discussion at A721/B749.

real from merely logical predicates or about how some concepts come to be related synthetically. Because it is not itself a theory of knowledge, general logic can provide no account of the relation of our concepts to things. But this does not mean that the procedure of logical comparison is dependent upon a specifically Kantian account of that relation. Logical reflection compares the intensional content of our concepts, *however* they happen to get that content.

## VI

I turn finally to what I think is a more promising version of Wolff's argument that general logic in Kant is not purely formal and cannot function as a self-sufficient canon of pure reason. To see this we need only review the material of the above discussion in a slightly different light. General logic "abstracts from content," not in the sense that it is supposed by Kant to be able to determine logical relations in the absence of any attention to their modality but in the sense that it is not a theory of knowledge and therefore can provide no account of how it is that some of our concepts are capable of relating to objects. If we focus our attention again on this latter point, on Kant's denial to general logic of the role of an organon, I think we can discover what is right about Wolff's claim that its formalism is conditioned.

First, we need merely recall that Kant's characterization of general logic as a canon is contingent upon his rejection of Leibniz's overestimation of the productive powers of human cognition. General logic cannot function as an organon governing the production of assertions about the content of empirical knowledge, Kant thinks, because that content is not simply a species of intellectual representation. This is why we cannot follow Leibniz in inferring from any analysis of our concepts the real relations of things and why the laws of general logic are at best "negative" or "formal" criteria of (material) truth (A59f./B83f.).

Of course, Kant is not the only philosopher unwilling to embrace Leibniz's theory of mind; we would thus go too far were we to claim that the conception of general logic as a canon necessarily presupposes an epistemology of transcendental idealism. (An empiricist could surely deny general logic the role of an organon as well.) Nonetheless, Kant's characterization of general logic as providing no more than a negative or formal criterion of truth does imply a commitment to some view about the capacities (or limits) of our form of cognition. An account of how it is that our concepts come to have content, come to refer to objects of possible experience, must fall outside the domain of general logic, he insists, because our understanding is not "through its representations the cause of the object. . . ."<sup>17</sup> Again, while this commitment does not presuppose Kant's fully worked-out solution to the problem of guaranteeing the objective validity of our concepts, in narrowing the options it prepares the way.

Furthermore, both the fact that general logic is not a theory of knowledge and that it is not possible within its domain to determine how our concepts come to contain the content they do imply that its identification of logical relations does depend upon assumptions made external to it. If its self-sufficiency as a canon of

<sup>17</sup>See Kant's letter of February 21, 1772 to Marcus Herz. Here I have relied on Lewis White Beck's translation in *Studies in the Philosophy of Kant*, p. 231.

content distinction central to the Critical philosophy. Hegel thinks that this dichotomy is what blocks the way to a "genuine" form of idealism and what condemns us to skepticism, in denying to human cognition knowledge of things in themselves.<sup>20</sup> Once Kant forges his gap between form and content, between the contributions of the intellect and the independently given matter of sensible intuition, Hegel argues, he sets himself the formidable task of trying to get them back together again. His "solution" to this problem is merely "subjective," Hegel tells us, because it establishes no more than that "we can know a priori of things only what we ourselves put into them" (Bxviii).<sup>21</sup>

The reason why Wolff's attempt to draw out the material conditions of Kant's general logic is Hegelian, as I understand it, is that it asks us to take more seriously than Hegel thinks Kant himself did one of the central tenets of the first *Critique*: that thoughts without content are empty. Hegel objects just as much to the idea of presuppositionless, context- or metaphysics-independent laws of pure reason (including laws of general logic) as he does to the idea of a formless content. The latter assumption, he thinks, is inconsistent with Kant's insight in the Transcendental Deduction that any object of human cognition must be subject to the necessary determinations of the "I think." Properly understood, what the argument of the Deduction implies according to Hegel is that there is for human knowledge no content that is not subject to form. An independent or undetermined content or thing in itself cannot therefore be appealed to as evidence in support of skeptical conclusions about the limits to what we can know.

In this paper, however, I have been focusing on Hegelian arguments in favor of the thesis that there can be for us no contentless form. What Hegel intends by this is that our conception of form is just as dependent on our conception of content as our conception of content is on that of form. The reason why Wolff's critique of Kant is Hegelian is that it urges that general logic cannot perform its function of determining logical relations without the assistance of background metaphysical assumptions, be they those of some brand of transcendental realism or those of the transcendental idealist. It is in this way that the self-sufficiency of general logic as a canon of pure reason is undetermined and, as Hegel would claim, that logic and metaphysics coincide.<sup>22</sup>

<sup>20</sup>See the Preface to Hegel's "Differenz des Fichte'schen und Schelling'schen Systems der Philosophie" of 1801.

<sup>21</sup>The quote is from the B-Preface of the first *Critique*, p. xviii.

<sup>22</sup>See §24 of Hegel's *Encyclopädie der philosophischen Wissenschaften: Teil I. Wissenschaft der Logik*.