Clinton Tolley

The Relation between Ontology and Logic in Kant

Abstract. It is shown in this paper how reflection on the views of Kant's predecessors on the relation between ontology (the science of being in general) and logic (the science of the intellect or understanding in general) can help illuminate Kant's own "Critical" reconception of the relationship between ontology and logic. The paper begins by focusing especially on the question of what sort of ontological cognition is involved in Kant's new "transcendental" logic, understood as the science of "concepts of objects in general". The paper concludes with a sketch of how Kant's account of intuitive understanding sets the stage for Hegel's more speculative conception of logic.

In diesem Aufsatz wird gezeigt, wie die Betrachtung der Meinungen von Kants Vorgängern über das Verhältnis zwischen Ontologie (der Wissenschaft vom Sein im Allgemeinen) und Logik (der Wissenschaft von Verstand oder vom Verstehen im Allgemeinen) dazu beitragen kann, Kants eigene „Kritische" Konzeption der Beziehung zwischen Ontologie und Logik zu erhellen. Der Fokus richtet sich besonders auf die Frage, welche Art ontologischer Erkenntnis bei Kants neuer „transzendentaler" Logik, verstanden als Wissenschaft von „Konzepten von Objekten im Allgemeinen", gemeint ist. Abschließend wird skizziert, wie Kants Betrachtung von intuitivem Verstehen die Voraussetzung für Hegels spekulativere Konzeption von Logik schafft.

§ 1 From ontology to logic and back again?

Recently there has been a resurgence of interest in re-contextualizing Kant's idealism within the tradition of early modern German metaphysics, in order to better understand the metaphysical commitments and presuppositions of transcendental idealism itself.[1] Here I aim to contribute to this project, by exploring how reflection on the views of Kant's predecessors on the relation between *ontology*, as the science of *being* in general (as *metaphysica generalis*), and *logic*, as the science of the *intellect* or understanding in general, can help us better under-

1 Compare Ameriks 2000, Watkins 2005, Jauernig 2008, Boehm 2013, Dyck 2014, Stang 2016, and the essays in Stang and Schafer forthcoming. For earlier attempts at this sort of recontextualization, see Pichler 1910, Heimsoeth 1924, and Beck 1969.

DOI 10.1515/9783110518931-005

stand Kant's own "Critical" reconception of the relationship between ontology and logic – especially in light of Kant's broadening of logic to include what he calls "transcendental" logic, understood as the science of "concepts of objects in general". I will also outline how threads in Kant's own claims about logic and ontology threaten to push beyond their own official limits, and in part anticipate, or at least motivate, the more speculative and ostensibly more metaphysical conception of logic that follows in Kant's wake.

In § 2 I show, first, that Kant accepts the early modern thought that logic is in some sense *subordinate to* ontology, because logic is only about one specific kind of being (i. e., our understanding), whereas ontology is about being "in general". This is so, despite the fact that Kant also means to recharacterize the traditional logic as a specifically "formal" discipline, in the sense of focusing only on the forms of acts of understanding. In § 3 I introduce Kant's revolutionary thesis that a new "transcendental" logic must be developed *out of* the traditional logic, and that this new logic itself will be the science of "concepts of objects in general" (B 125), in order to begin to clarify how and why he thinks that transcendental logic can and should ultimately serve as *a replacement for* the traditional ontology (cf. B 303). As I argue in § 4, however, it becomes less clear exactly how transcendental logic is supposed to differ from the traditional ontology, insofar as Kant seems to allow that, like ontology, transcendental logic and its principles can be used to establish conclusions, not merely about our concepts of objects, but rather about all possible objects of our understanding "in general".

In § 5 I turn to the difficult task of showing how the foregoing is supposed to cohere with Kant's "Critical" insistence that, for the (theoretical) cognition of an object, the mind must have a sensible *intuition* of that object, and the cognition of the object must go by way of a consciousness of this intuition (cf. B 75–76). For one thing, this view of cognition would seem to speak against the possibility of the kind of unrestrictedly universal "object-theoretical" cognition floated in § 4, and speak for a restriction of transcendental-logical cognition (and hence the "Critical" ontology) to objects of possible intuition. More problematically, this restriction also seems to speak against the very possibility of the kind of cognition presupposed in the traditional logic in the first place – i. e., cognition, not merely of the *concept* of understanding, nor merely of how the understanding appears in (inner) *intuition*, but rather cognition of the understanding *itself* and its acts. Moreover, this cognition of the understanding itself is to be done *by the understanding alone*, as "*self*-cognition", which would seem to bypass intuition altogether.

I conclude in § 6 by introducing a still further difficulty, one that points forward to the subsequent reconception of logic *as metaphysics*, by the post-Kantian idealists. This is Kant's acceptance of the conceivability of, and in fact, belief

in the existence of, a species of understanding different from our own – more specifically, one which would cognize "things as they are in themselves" and yet would do so by an act whose form and content both are of a fundamentally different kind than our own acts of understanding. This possibility introduces a gap between how *we* can think or even cognize things (through concepts), and how *this* understanding would cognize things (without concepts), and would therefore seem to place all of the findings of the logic of our specifically discursive intellect (whether traditional or transcendental) on the opposite side from the things themselves. Even more problematically – at least from the point of view of self-consistency, as Hegel in particular would later emphasize – this very awareness of such a restrictedness of our own understanding (and hence of the domain of both the traditional and transcendental logic) would seem to be itself something achieved *by our own understanding*.

§ 2 The subordination of the traditional logic to ontology in Baumgarten and Kant

In Baumgarten's *Metaphysica*, the textbook Kant used for his own metaphysics lectures, ontology is described as a distinguished component part of metaphysics. Metaphysics itself, for Baumgarten, is "the science of the first principles of human cognition" (Baumgarten 1779, § 1). Metaphysics divides into two parts: first, it has a universal component (*metaphysica universalis*), which is identified with "ontology", and is "the basic science [*die Grund-Wissenschaft*]" and "first philosophy [*philosophia prima*]", and which consists in "the science of the most general predicates of entities" (Baumgarten 1779, § 4). Second, metaphysics contains a part which focuses instead on particular "species" of entities (what Kant himself refers in his notes on metaphysics as "*metaphysica specialis*": Ak. 18, pp. 11, 284), such as necessary being, spiritual being, etc.

Baumgarten's *Acroasis Logica* gives the following succinct picture of where logic fits into this general taxonomy of metaphysics:

Philosophy, as it is pursued among humans, considers being:

I. in general, ontologia [Grund-Wissenschaft] (metaphysica strictus);
II. according to the species,
    1. necessary being, theologia naturalis;
    2. contingent being,
        a. in general, cosmologia;
        b. according to the species, in this world,
            α. bodily [...]

β. spiritual,
  i. in general, pneumatica [Geisterlehre],
  ii. according to the species, human soul
    1) generally, psychologia [Seelenlehre oder Seelenwissenschaft],
    2) specifically, as to the
      A) cognitive,
        a) lower faculty, aesthetica [Wissenschaft vom Schoenen],
        b) higher faculty, logica [Vernunftlehre];
      B) appetitive, practica [...]. (Baumgarten 1773, § 37)

Note, first, that logic is explicitly placed on the side of philosophy (metaphysics) which considers being "according to species" rather than "in general". Secondly, logic is subordinate to a whole series of other "specific" disciplines, as it is focused on a very particular species of being: one that is contingent, worldly, spiritual, and human. In fact, logic doesn't even consider this species of being "in general", but rather considers it only as to *one* of its two specifically cognitive faculties: its faculty or capacity for "reason" – or, as Baumgarten also describes it later in the *Acroasis*, "the intellect" (cf. Baumgarten 1773, § 41; cf. § 42).

For this reason, Baumgarten claims that the "first principles" of logic (along with aesthetic) are "contained in psychology", whose principles are in turn contained in general "metaphysics", or ontology (Baumgarten 1779, §§ 501–502). In order to know what it is to be an intellect, one needs to know what it is to be a cognitive, psychological, spiritual, contingent capacity more generally, and what it is simply to be at all.

Now, Kant's readers would not fail to hear echoes of Baumgarten's taxonomy in the first *Critique*'s own characterization of logic:

> If we want to call the receptivity of our mind to receive representations, insofar as it is affected in some way, sensibility, then by contrast the capacity to bring forth representations from itself, or the spontaneity of cognition, is called understanding [*Verstand*]. [...] Hence we distinguish the science of the rules of sensibility in general, i.e., aesthetic, from the science of the rules of understanding in general, i.e., logic. (B 75–76)

Indeed, similar definitions are given throughout Kant's lectures on logic and metaphysics.[2] For Kant as for Baumgarten, then, the subject-matter of logic is

2 Cf. Ak. 9, p. 13; Ak. 24, p. 693; Ak. 29, p. 755. Throughout I will cite Kant's works according to the *Akademie-Ausgabe* volume number and pagination (cf. Kant 1900–), with the exception of the first *Critique*, which I will cite according to the B-edition pagination, save for places where the passage is only to be found in the A-edition. All translations throughout are my own, though I have consulted (and often followed) the Cambridge Edition translations when available (cf. Kant 1992-).

thus a specific faculty ("capacity [*Vermögen*]") that a specific kind of being (a human mind) possesses: our understanding ("intellect").[3] Hence, even in its most "universal [*allgemeine*]" form, logic provides those "absolutely necessary rules [...] without which no *use of the understanding* takes place [*stattfindet*]" (B 76; my ital.).

Kant also follows the tradition in seeing the understanding as a capacity whose activity is most generically characterized as "*thinking* [Denken]" (B 75), and in viewing thinking as coming in various kinds, kinds that are traditionally organized under four main headings: conceiving, judging, inferring (reasoning), and constructing a science (cf. Ak. 9, pp. 91, 101, 114, and 139).[4] Even so, as has often been noted, Kant argues for a recentering of this fourfold division by taking *judging* to have priority as the paradigmatic kind of activity of understanding.[5] Logic will therefore be occupied first of all with the identification of the most basic kinds of judging – a task Kant thinks has already been accomplished by the "common [*gemeine*] logic" of his day: it has been able to "fully and systematically enumerate" the "simple acts [*einfache Handlungen*]" of understanding (A xiv), such that "the already finished work of the logicians put [him] in a position to present a complete table" of these acts, albeit now ordered around their relation to judging in particular (Ak. 4, p. 323–324).

Along with the identification of its basic *kinds* of activity, logic will also have the task of setting out the laws or *rules* that govern the acts of understanding. In Kant's view, the most "elementary logic [*Elementarlogik*]" will present those laws or rules that constitute the activity of understanding *as such*, i.e., the laws or rules the following of which is unconditionally or categorically necessary for something to be an act of understanding in the first place, or a "use [*Gebrauch*]" of this capacity *at all*. That is, it will contain "the absolutely necessary rules of thinking, without which *no use* of the understanding takes place" (B 76, my ital.; compare Ak. 9, p. 12, Ak. 24, p. 792).

Now, because we can think about ("direct [*richten*]" ourselves in thought toward) many different kinds of things, a truly elementary logic must consider our use of understanding in thinking "without regard to the difference of the objects

3 Kant emphasizes, in a way that Baumgarten does not, that our mental capacity for understanding can be investigated "purely", and concludes that a pure logic therefore cannot draw any specifically "*empirical* principles" from psychology (B 78; my ital.). But this does not change the fact that, for Kant as for Baumgarten, the ultimate subject-matter of logic (the understanding) remains something "psychological" in the broad sense of being a capacity of a mind possessed by a soul.

4 Compare Arnauld and Nicole's 1662 *Logique ou l'art de penser* (the "Port-Royal" Logic).

5 Compare B 94; Ak. 4, p. 323; B 89; see Longuenesse 1998, pp. 58–106.

to which it may be directed" (B 76; compare again Ak. 9, p. 12, Ak. 24, p. 792). This will allow the elementary component of the "common [*gemeine*]" logic to constitute a genuinely "*general* or *universal* [allgemeine]" logic, by presenting only what pertains to *all* acts of understanding whatsoever (B 76). Yet as should already be evident, Kant takes this "universality" to range over *only* a very *particular* domain – namely, the domain of acts of understanding or thinking.

What is more, a second key feature of traditional elementary logic makes its domain even more restricted: its *formality*. As we have just seen, the traditional logic abstracts from the differences in kinds of objects toward which thinking can be directed, in order to consider only what is common to the basic kinds of acts of understanding, regardless of their objects. Now, the "relation [*Beziehung*]" that a cognition bears to its object is what Kant calls the "*content* [Inhalt]" of the cognition (B 79; my ital.; cf. B 83). Hence, when the traditional logic "abstracts from the differences of the objects" to which our understanding can be related, it thereby "abstracts from all *content* of the cognition of understanding", which Kant takes to imply that it "has only to do with the mere *form* of thinking" (B 78; cf. B 79, Ak. 24, p. 791, Ak. 9, p. 12–13). In this respect, the common elementary logic is a "merely *formal* logic" (B 170; my ital.; cf. Ak. 24, pp. 695, 699, 814).

Finally by "abstracting from all *objects* of cognition and all the distinctions between them", the traditional, merely formal, logic has attained a standpoint in which "the understanding has to do with nothing further than *itself*" (B ix; my ital.). In this, logic itself contrasts sharply with other sciences – including metaphysics and ontology as it is traditionally understood – where our understanding "does not have to do *merely with itself*, but has to deal *with objects* as well" (ibid.; my ital.; cf. Ak. 4, p. 387; Ak. 24, p. 699; Ak. 29, p. 945). For this reason, Kant thinks the traditional logic can be aptly characterized as the "*self*-cognition [Selbst-*Erkenntniß*] of the understanding" (Ak. 9, p. 14; my ital.).[6]

Crucially, then, the forms at issue in "formal logic", for Kant, are forms of certain mental *acts* (thinking, judging, etc.) and are therefore not at all seen as (or claimed to be) the forms of every *object* whatsoever. We should therefore resist any urge to assimilate what Kant means when he claims that the traditional logic is a "universal" and "formal" logic to what others, especially more recent philosophers of logic, might mean when they characterize logic using similar labels. Especially after Russell, it has been common to think of the universality of logic in terms of an unrestrictedness of its domain: logic is about the most gen-

6 Compare: "Logic is a self-cognition of the understanding and of reason with regard to form" (Ak. 29, p. 784).

eral or universal features of everything whatsoever.[7] Certain properties and relations are distinctively "logical" because they hold of every object simply in virtue of its being an object at all, not in virtue of any specific feature that would distinguish one object from another. This in turn then allows us to classify certain propositions as distinctively logical: they state universal relations between these universal predications (express what is true (or false) in all possible circumstances ("worlds")). Finally, because of its invariant presence in and across all objects, and its indifference to any features that would differentiate objects into kinds or species, what is expressed in such logical propositions is then often identified with what is "formal" in the world itself.[8]

As we have just seen, none of this is built into Kant's own characterization of the subject-matter of the traditional logic as something "universal" and "formal". Kant thinks logic has in view, not objects and the world in general, but rather one capacity of the human subject and the forms of its activity. Despite what might otherwise be connoted nowadays by these labels,[9] Kant simply does not think that calling logic a pure general formal science at all entails that it is the most universal science that there is.[10]

§ 3 From act to content: Kant's introduction of a new "transcendental" logic

I have argued that, for Kant, the subject-matter of the traditional logic is not the domain of all objects whatsoever, but is restricted to a very specific kind of object or being: our capacity for understanding, and the elementary forms of its acts. What I want to introduce now are the motivations behind Kant's new "*transcendental*" logic, as well as its nature as a discipline. This will set up our discussion in the following section (§ 4), in which we will consider the striking connection Kant draws between this logic and ontology as he means for it to be understood.

What does Kant mean by a "transcendental" logic, and why does he think its investigations are as necessary, and every bit as "logical", as those of the traditional logic? The first thing to note is that, though he thinks logic in general is in

7 Compare Russell 1918; cf. Goldfarb 2001 and MacFarlane 2002.

8 See Sher 1991; compare what Sider 2012 calls "structure".

9 For a catalogue of a still further variety of things that have been meant by calling logic "formal", in particular, see MacFarlane 2000 and Dutilh Novaes 2011.

10 For more discussion of the specific kind of generality that pertains to Kant's logic, see Tolley 2012a, 2012b, and 2013; compare MacFarlane 2002.

need of supplementation, Kant does not mean to deny any of the achievements of the traditional logic as to its specific domain. Indeed, once its true nature has been clearly understood, Kant (infamously) thinks that it is actually a "complete and finished" portrayal of its object (B viii) – namely, the basic forms of acts of thinking.[11] Even so, precisely because of its focus on form, this logic has neglected an equally fundamental aspect of our understanding and its acts. This aspect is what would now be called the intrinsic *intentionality* of thinking. For though Kant agrees that the understanding is a capacity for certain kinds of *acts*, the particular kind of activity that it engages in is one that is *representational*. Now, Kant takes *all* "representations [*Vorstellungen*]" to "have" an object, at least in the sense of being intentionally related to something (even if this object is not real or does not exist; cf. A 108). Thinking is, of course, a species of representation – namely, a representation "through *concepts*" (cf. B 94) – and as such, it too will be the sort of thing that "has" an object.[12]

Since this "relation to an object" is what constitutes the "content" of thinking, it is essential to *all* thinking that it has at least *some*, however minimal, content.[13] But then, given the universality of this determination of thinking itself, we should be able to at least raise the possibility of a science of thinking – and hence a kind of logic – "in which one did *not* abstract from *all* content of cognition" after all (B 80; my ital.), but sought to analyze the most universal, elementary contents that belong to all thinking per se, if there were any such contents. Of course, it might turn out that there is simply *nothing* to say "in general" about the content of thinking, other than the bare assertion that there must be some content or other involved, and that it will involve the representation of properties ("marks"; cf. B 377). If this were so, one might be forgiven for viewing the traditional logic as more or less exhausting its topic – save, perhaps, for providing an explicit argument showing that there is nothing much for it to say about nature of content of thinking in general.

Kant, however, thinks that there is in fact a good bit to say about this content "in general". In fact, Kant thinks the very findings of the traditional logic already provide a "clue [*Leitfaden*]" to the discovery of a distinctive set of contents that are and must be involved in all thinking (cf. B 91 f.). In effect, Kant's proposal is

11 Though Kant does say that "the work of the logicians" is "not *entirely* without errors" (Ak. 4, p. 323; my ital.).

12 In his logic lectures, Kant makes clear that he takes *all* cognitions (whether through concepts or otherwise) to have a "relation to an object"; cf. Ak. 24, p. 805 and Ak. 9, p. 33. See also B 376 – 377.

13 Whether or not this conceptual content can be put in any kind of coordination with intuitive content, and so whether or not it is "empty" in this more specific sense (cf. B 75).

that, due to the intentionality of all acts of understanding, each distinct "elementary" form of thinking that the traditional logic has already uncovered must at the very same time be something that determines (or at least is correlated with) a distinct "elementary" way of representationally relating to an object:

> The same understanding, therefore, and indeed by means of the very same acts [*Handlungen*] through which it brings the logical *form* of a judgment into concepts [...] also brings a transcendental *content* [Inhalt] into its representations [...] on account of which they are called pure concepts of the understanding that *pertain to* [gehen auf] *objects* a priori. (B 105; my ital.)

For example, having one's mind act in such a way that brings about a unity of two conceivings, according to the logical *form* of a categorical judgment (an act expressed by "S is P"), is something that also consists in our having a thought with a certain *content* – namely, our having a thought that representationally relates us to something as an object or thing or "substance" (represented by the subject-concept) as having (represented by the copula) a certain property or "inherence" (represented by the predicate-concept; cf. B 106). The content that distinguishes a representation as being of an object in this way is what Kant calls the "pure concept" of the relation between substance and inherence (B 106).

By engaging in reflection on each of the basic traditional-logical forms, we can identify a whole set of such concepts (contents), and can then arrange them on a corresponding Table of concepts of objects that parallels exactly the Table of logical forms of *acts* of thinking in judging. In this way Kant thinks "there arise [*entspringen*] exactly as many pure concepts of the understanding [...] as there were logical [forms] of all possible judgments" (B 105).[14] And just as the Table of traditional-logical forms "completely exhausts and fully measures the understanding and its capacity" (B 105), so too does the Table of transcendental-logical contents (concepts) provide a "listing [*Verzeichnung*] of *all* the original [*ursprünglich*] pure concepts" (my ital.) and so attains an equivalent "completeness [*Vollzähligkeit*]" in its analysis (B 106). Just as the traditional logic provides the universal formal conditions for an act of understanding's "taking place" (cf. B 76), so too does transcendental logic provide the universal conditions on what contents such acts must involve: i.e., "it exhausts all moments of the understanding, under which every other concept must be brought"

14 Here Kant writes "function" where I have "form". For Kant's explanation of the notion of a function, see B 93; for the association of the form of thinking with functions, see B 95. For our purposes, any difference that might obtain between the two notions is not significant. For some helpful suggestions concerning what the nature of the difference between form and function might amount to, compare Longuenesse 1998, p. 3 note 2.

(Ak. 4, p. 325).[15] Hence, just as the traditional logic completely and systematically enumerates the elementary ("simple") acts of thinking, so too does transcendental logic provide an "analysis" of the "elementary concepts" involved in thinking (B 89; cf. B 168).

Now, many persisting questions remain about whether Kant's Metaphysical Deduction of these elementary concepts is, or even can be, a successful one.[16] What is most important for us, however, is simply that, in order to arrive at the subject-matter of Kant's new logic, we have not gone outside of the original subject-matter of the traditional logic itself. Despite the traditional logic's intention to bracket questions of content (which entails that the discovery of these basic contents "can never be accomplished by [this] logic"; B 105), Kant thinks that its very findings are nevertheless sufficient to allow us to determine that certain kinds of content will be involved in acts of thinking simply in virtue of their being unified according to one or another logical form. Just so long as we keep in mind the essential intentionality of thinking when we look at its findings, these forms can provide "the clue for the discovery of all pure concepts of understanding" (B 91). In order for the pure concepts to "arise", all Kant had to do (as he tells the story) was "*relate* these [forms] of judging *to* objects in general" (Ak. 4, p. 324; my ital.).[17] The transcendental-logical contents were implicitly there to be discovered all along.

Yet for this very reason, Kant takes these concepts (contents) to have the same "origin [*Ursprung*]" ("birthplace [*Geburtsort*]"; B 90) as the logical forms themselves (B 159), since it is our *understanding* that *itself* "brings" a certain "content" into this form simply by acting a certain way, indeed "through the *very same* actions [*Handlungen*] [...] that it brings about the logical form of judgment" (B 105; my ital.).[18] Strikingly, all of this leads Kant in his lectures to claim that transcendental logic, too, is ultimately only the "*self*-cognition of the understanding" (Ak. 29, pp. 752–756 and 784–785).

---

15 Compare: the pure concepts of the understanding are those "without which *no* object can be thought" (Ak. 5, p. 136; cf. B 106).

16 For the classic, spirited, and still very informative defense of Kant's strategy, see Reich 1932/1948; more recently, see Wolff 1995, and Longuenesse 1998. Compare also the discussion below in § 5.

17 Here again I have replaced "function" with "form".

18 Compare: the pure concepts "have their seat [*Sitz*] and origin [*Ursprung*] in the pure understanding solely as the faculty of thinking, independently and prior to any intuition" (Ak. 5, p. 136). The new transcendental logic, therefore, will investigate "the pure understanding" as something that "completely separates itself [*sondert sich aus*] [...] from all sensibility", as "a unity that subsists for itself and is sufficient by itself" (B 89–90).

This, however, would seem to introduce a clear restriction into the domain at issue in transcendental logic as well. First, as the study ("analytic") of the pure concepts qua *contents* of acts of understanding, transcendental logic ultimately retains the traditional logic's distance from *objects* themselves, since its subject-matter, too, remains at the level of representations (concepts) of things rather than the things themselves. Secondly, insofar as this logic only investigates concepts (content), since not every object or thing is itself a concept (viz., the understanding itself, or the subject engaged in acts of thinking by "using" this capacity), the domain of transcendental logic, too, should not be thought to constitute a genuinely universal domain of all things.

§ 4 From content to object? Transcendental logic as a successor to ontology

Strikingly, in Kant's metaphysics lectures, he also claims that the traditional *ontology* itself should be reconceived along just these same lines as well. That is, ontology itself is better understood as a logic:

> If [ontology] is to consider the properties of all things, then it has as an object nothing but a thing in general, i.e., every object of thought, thus no determinate object. Thus nothing remains for me to consider other than *the cognizing*. (The science which deals with objects in general, will deal with nothing but those *concepts* through which the understanding thinks, thus of *the nature of the understanding* and of reason, insofar as it cognizes something a priori.) [...] But this science will not properly be called ontology. For to have a thing in general as an object is as much as to have no object and to treat only of a cognition, *as in logic*. (Ak. 29, p. 784–786; my ital.)

Reconceived in this way, what had purported to be a science of being in general should now simply collapse into Kant's new science of the basic contents of understanding.

In fact, in the first *Critique*, Kant famously claims just this: "the proud name of an *ontology* which purports to give synthetic cognition a priori of things in general in a systematic doctrine (e.g., the basic proposition of causality) must give up its place for the more modest one of a *mere analytic of the pure understanding*" – with the latter "analytic" now understood to be a component of transcendental logic itself (B 303; my ital.). A similar point is hinted at already much earlier in the "Analytic", which foreshadows the sort of replacement or revision he has in mind:

> The allegedly transcendental predicates of *things* [named in traditional ontology] are nothing other than logical requirements and critieria of all *cognition* of things in general [...] and they have their ground in the categories [i.e. pure concepts], only while these must have been taken genuinely materially, as belonging to the possibility of things themselves, in fact they are to be used only in formal significance, as belonging to the logical requirement with respect to each cognition, and so these criteria of *thinking* are made in a careless way into properties [*Eigenschaften*] of *things*. (B 113–114; my ital.)

The traditional ontology, therefore, has actually mistaken its subject-matter: while it takes itself to be investigating properties (predicates) of objects, really it is only investigating the pure contents of understanding – in fact, only investigating our understanding itself.

This might suggest that Kant means to radically "subjectivize" ontology, by shifting its domain to something "contained" entirely within our intellect.[19] Recall, however, that these "contents" themselves are nevertheless object-*directed:* they are the elementary ways in which we "can think objects a priori". What is more, elsewhere in the *Critique*, transcendental logic, and transcendental philosophy more generally, seems to be able to teach us something about the objects to which we are related through pure contents (concepts), rather than merely something about the concepts of these objects. In fact, Kant ultimately appears to describe transcendental philosophy as both part of "metaphysics" but also as "ontology" in this more object-involving sense:

> The speculative part of [metaphysics] [...] consists in transcendental philosophy and the physiology of pure reason. The first considers only understanding and reason itself in a system of all concepts and basic propositions that are related to objects in general, without assuming [*annehmen*] objects that would be given (*ontologia*); the second considers nature, i.e., the sum-total of given objects (whether they may be given to the senses, or, if one wants, another kind of intuition), and is therefore *physiology* (though merely rational). (B 873)

Ontology continues to provide "a system of all concepts and basic propositions that are *related to objects* in general", even (seemingly) beyond those objects which we can demonstrate can be "given to the senses".

What is more, logic itself at times seems to be able to yield cognition about the possible *objects* of understanding, rather than simply a "self-cognition" of the understanding itself. Consider Kant's acceptance of the possibility of analytic

19 It is this line of thought that gives force to Hegel's central criticisms (in his own *Logik*) of Kant's doctrine of the categories, and transcendental logic more generally, for being too subjective; cf. Ameriks 1985, Bristow 2002, and especially Sedgwick 2012; see also below § 6.

judgments whose truth is able to be "cognized" simply through principles "belonging in logic", such as the "proposition [*Satz*]" ("principle") of contradiction:

> Now, the proposition: to no thing pertains a predicate which contradicts it, is called the proposition of contradiction and is a universal though merely negative criterion of all truth, which for this reason belongs in logic, because it holds of cognitions merely as cognitions in general without consideration of their content and says that contradiction entirely annihilates and cancels [*vernichte und aufhebe*] them. One can, however, also make a positive use of it, i.e., not merely to prohibit falsity and error (insofar as it rests on contradiction) but also to cognize truth. For if a judgment is analytic, whether it is negative or affirmative, then its truth must always be able to be cognized sufficiently according to the proposition of contradiction. (B 190)

What would it mean to cognize the *truth* of a judgment or cognition – i.e., its "correspondence or agreement [*Übereinstimmung*] with its object" (B 82) – without coming to know how things are with the *object(s)* represented by the concepts in the judgment or cognition? Furthermore, we can cognize the judgment's agreement with its object (i.e., with what is represented in it) even "*without* consideration of its content", which implies that the truth we come to cognize is not (primarily) a truth *about* the content itself.[20]

Elsewhere, however, Kant does appear to infer conclusions about how things are at the level of objects, from facts about how things are at the level of contents (concepts, thoughts) – claiming, for example, that "the *object* of a concept which contradicts itself is nothing *because* [weil] its *concept* is nothing, the impossible, as in: the rectilinear figure of two sides (*nihil negativum*)" (B 348; my ital.). What is more, it is precisely the concept of an object in general which Kant thinks is the absolutely "*highest* concept" – i.e., the concept under which absolutely everything falls, and with which the "transcendental philosophy" must "begin" (B 346). This concept allows us to grasp something "higher" than even "the division between the possible and the impossible" – namely, what it is to be an object as such, leaving it "undecided whether it is something or nothing" (B 346). That is, the "manifold differentiation of the concepts of something and nothing", which Kant recognizes as "one of the most abstract ontological divisions" (Ak. 4, p. 325), is something that only comes after the grasp of the concept of an object itself. But what would it mean for us to grasp the "highest" con-

20 For further discussion of the options available to Kant concerning the truth of analytic judgments, see Rosenkoetter 2008, Lu-Adler 2013, Anderson 2015.

cept of an object without understanding or knowing what it is to *be* an object – i. e., without knowing something about this most universal *property* of objects?[21]

This line of thought about the cognition available within transcendental logic ultimately brings it quite close in several ways to the cognition thought to be available in the traditional metaphysics and ontology of the rationalist tradition of Wolff and Baumgarten. Baumgarten himself begins the very first contentful section of his ontology precisely with what "universal predicates" of entities can be determined by virtue of the principle of contradiction:

> *Nihil negativum* is that which is unrepresentable, impossible, repugnant, (absurd,) what involves a contradiction, what is A and non-A; that is, there is no subject of contradictory predicates; that is, nothing is and is not. 0 = A + non-A. This proposition is called the *principle of contradiction* and the absolutely first. (Baumgarten 1779, § 7)

Baumgarten, too, seems to infer equally to the absence of a "subject", at the level of *objects*, from the presence (involvement) of a contradiction among the predicates, even while he also seems to take contradiction to be something which itself stands in the way of (Kant: annihilates and cancels) the possibility of the *representation* of this object. What is more, Baumgarten here seems to take for granted that the concept of what is representable is at least as primitively understood, if not more so, than this first universal predicate of objects, since it is that in terms of which the predicate of being a "negative nothing" is elucidated.[22]

How does this fit with the countervailing line of analysis noted above in Kant's discussions, which does seem to treat what is cognized "logically", due to the presence of contradiction in thought, as something wholly "internal" to the level of content itself? When discussing the principle of contradiction, for example, Kant emphasizes that the principle "holds [*gilt*] of *cognitions* merely as cognitions in general", as a "general [*allgemeine*] condition of all our *judgments*" (B 189–190; my ital.). Similar remarks can be found throughout his lectures on logic, where Kant identifies the principle of contradiction as that "through

21 Even if we don't thereby know if this property is actually instantiated in any really existing object.

22 Compare Pichler 1910 and Heimsoeth 1924. As Pichler especially emphasizes, this brings both Baumgarten and Kant close to Meinong, who also means to reconceive of the most universal science, not as the traditional "metaphysics", by which he understands the science of what exists or is real, but rather with the theory of "objects in general" (*Gegenstandstheorie*). This science extends to all possible objects of thinking and cognizing (Meinong 1904, § 2), which Meinong takes to include all objects whatsoever: "what is cognizeable, is also what there is [*es gibt*]"; "there is [...] *no object* which would not be in possibility an object of cognition" (Meinong 1904, § 6; my ital.).

which the *internal* possibility of a *cognition* is determined" (Ak. 9, p. 52–53; my ital.; cf. Ak. 24, p. 823–827). What Kant seems to have in mind here, first and foremost, is that "agreement [*Übereinstimmung*]" with this principle (and others) is a necessary condition for something to be a cognition of the understanding at all (cf. Ak. 9, p. 51). There is no further claim that such agreement or failure of agreement is determinative of anything about the objects of the putative cognition; the agreement at issue here is not the agreement of the thought with something external to it qua act of understanding (as would be an agreement with the object it is representing). Rather, this "agreement with the universal laws of understanding" is, in some sense, an "agreement of the cognition *with itself* [*Übereinstimmung* mit sich selbst]" (Ak. 9, p. 51; my ital.; cf. Ak. 24, pp. 823, 718).

Moreover, the kind of "truth" that is achieved in this self-agreement of the understanding is said to be the "*formal* truth" of a cognition, which consists merely in "the consistency [*Zusammenstimmung*] of cognition *with itself*, in complete abstraction from all *objects* whatsoever and from all difference among them" (Ak. 9, p. 51; my ital.; cf. Ak. 9, p. 16.). This suggests that what Kant himself might call a "logical truth" (like the principle of contradiction, understood purely logically as determinative of possible acts of thinking or contents of thoughts)[23] can be an expression only of basic conditions for the consistency or coherence among acts and contents of our understanding *with themselves*. There is little sign in the passages that the truth of such principles consists in their further agreement with basic or generic features of objects or things themselves.[24]

23 This qualification is necessary, since, as the quote from Baumgarten above indicates, the "principle of contradiction" was not taken as a distinctively *logical* principle at the time, holding first and foremost at the level of thinking or the *intellect* (understanding), but rather understood as an *ontological* principle, holding more generally for all of *being*. As Baumgarten's *Metaphysica* makes clear, logic "presupposes" this principle *from ontology* (cf. above § 2). What is more, Baumgarten's *Acroasis logica* does not give any pride of place whatsoever to the principle of contradiction (for example: neither contradiction, nor its "principle", are topics on its index), let alone single it out as of special relevance for logic or the determination of its domain.

24 Maddy 1999 describes this feature of Kant's views as consisting in the fact that, for Kant, "our simple logical truths" are "true by virtue of the structure of judgment" itself (98) and "[l]ogical truth is grounded in the structure of the discursive intellect" (104). The closely related but more difficult question is whether we should construe such principles (propositions) as actually being *about* our understanding, or *about* its concepts. Compare Henry Allison's way of cautioning against attempts to make either a logical principle (such as the principle of contradiction), or something cognized to be true or false solely on its basis, into a claim about things in themselves: "they can yield only analytic judgments *about the concepts* of things so considered" (Allison 2004, p. 56). For worries about this way of construing such propositions, see MacFarlane 2000.

Conversely, when Kant identifies candidates for *not* agreeing with the basic laws of understanding (i.e., that which would be "logically false"), Kant again consistently characterizes the items in question as mental acts or contents (concepts, judgments, thoughts, and so on), rather than objects. In the foregoing discussion of the principle of contradiction, for example, recall that it is putative judgments and cognitions that are said to be what would "contradict themselves" and so ultimately be "nothing *in themselves* [an sich selbst *nichts*]" (B 189; my ital.), because "contradiction entirely annihilates [*vernichtet*] and cancels [*aufhebt*] them" (B 190; cf. B 191). Here again, Kant does not point to the impossibility of an agreement with something outside of the mental activity of the understanding in order to ground the "nothingness" of these judgments on the impossibility of there being things or objects to which they could correspond. Rather, such judgments are "false" (or better, "nothing") simply because, as the lectures put it, they flout the "necessary rules [...] apart from which our *cognition* is untrue *in itself* [in sich selbst *unwahr*], *regardless of its objects*" (Ak. 9, p. 16; my ital.).

§ 5 Logic, ontology, and the limits of discursive "self-cognition"

Let us bracket for the moment the question of whether, and in what respect, Kant thinks that either traditional- or transcendental-logical "truths" concerning the acts and contents of the understanding entail any traditional-ontological truths about objects in general (however minimal, abstract, or indeterminate).[25] What I want to focus on now is the more specific, and in many ways more fundamental, question of how and in what way Kant thinks it is possible to achieve the kind of cognition which is expressed in the traditional logic textbooks in the first place: i.e., cognition *of the understanding itself* (its acts, its basic forms) *as object*.

At least according to the official doctrine of cognition enunciated in the *Critique* itself, the cognition of an object requires both a concept of the object as well as an intuition which relates to it (cf. B 75–76). An a priori cognition of

25 For interpretations which affirm that Kant holds we can know (perhaps "trivially") that logical laws, and analytic and tautologous propositions, apply to all objects, see Adams 1997, Van Cleve 1999, Watkins 2002, and Hogan 2009. Strictly speaking, there is some difficulty in the very idea that traditional (formal-) logical laws, as *Kant* understood them, would "apply" to anything *other* than the acts of our capacity for understanding. (Indeed, Kant explicitly claims that "nobody can dare to judge of objects and to assert anything about them merely with logic"; B 85.)

an object requires both an a priori concept and an a priori intuition. Now, because the traditional logic provides us with the pure *self*-cognition of the understanding and its forms, it seems to bypass the intuition requirement, since the understanding cannot intuit anything all by itself (cf. B 92–93). Moreover, no particular intuition seems well-suited to give the understanding and its laws to itself. To be of the understanding, it would need to be an "inner" intuition, by which "the mind intuits itself" (B 37). It would also need to be a "pure" inner intuition, so that logic can avoid drawing on any "empirical" principles (cf. B 78). Yet the pure inner intuition that we have, thinks Kant, is the intuition of time as "the *form* of inner sense, i.e., of intuiting our self and our inner state" (B 49; my ital.). Precisely because it merely gives the universal and necessary form of all inner intuiting, however, the pure intuition of time alone cannot give us a pure intuition of our understanding *in particular*, or any of its acts. In order to give the understanding and its acts to the mind, rather than simply give time alone, something more than the mere (pure) intuition would be necessary. More specifically, it would seem that there must be some sort of inner "affection" of inner sense by our understanding, so as to yield sensations which would fill in time to yield "inner appearances" of the understanding to the mind through inner intuition (cf. A 107). The problem with this, though, is that it would make the resulting representation of the understanding *impure*, because it would involve sensation (cf. B 34). What is more, the resulting inner intuition of our understanding and its activity would only represent our understanding *in appearance* or *as it appears*, rather than the understanding *itself* (cf. B 155).

The only "pure" self-representation of the understanding that Kant mentions comes through an act of pure "self-*consciousness* [*Selbst*-Bewußtsein]", what Kant calls "pure *apperception*". This is a mental act in which our thinking can become aware of itself directly and yet non-sensibly, and so not through inner sense or inner intuition: it is "a representation" that is itself "a *thinking* and not an *intuiting*" (B 157); a thinking directly about thinking, as it were. Yet while this would keep the representational relation in question "pure", Kant explicitly restricts the representational relation involved to a kind of "consciousness" of one's own activity, rather than a full-blown "cognition" of it, writing that "the consciousness of oneself is far from being a cognition of oneself" (B 158). What is more, though the object of such pure self-consciousness is distinguished from thinking "as it *appears* to myself", it is also distinguished from thinking "*as* it is *in itself*", and limited only to merely "*that*" the thinking act is (cf. B 157). Without being conscious of the "what" of thinking, however, it is not at all clear how logic could apprehend the manifold forms of its activity.

The absence of an account of the self-cognition presupposed by the traditional logic becomes especially problematic once we reconsider how it is that

Kant's new transcendental logic itself – and hence, the alleged successor to the traditional ontology – was to be discovered or arrived at in the first place.[26] Recall Kant's methodology in the Metaphysical Deduction of the pure concepts: he intends to derive these concepts from an already given, and already cognized, set of forms of acts of understanding, identified by the traditional logic. The step to the pure concepts, and hence to transcendental logic, is taken when we "relate these [forms] for judging to objects in general" (Ak. 4, p. 323–324).[27] Kant's account of the discovery of transcendental logic therefore implies that the knowledge gained in the traditional logic – i. e., the "self-cognition" of the understanding itself – was achieved prior to, and independently of, the cognition of the pure concepts themselves. This in turn, however, would seem to place what Baumgarten and the tradition would regard a fairly straightforwardly metaphysical cognition at the basis of the traditional logic itself – and hence, at the ground of the alleged successor to the traditional metaphysics (transcendental logic) as well. In effect, the self-cognition of the understanding, which Kant officially presumes we can achieve in logic, would have to constitute a case of the understanding's self-overcoming of the alleged "Critical" restriction of our understanding to cognition only through sensible intuition.

In fact, in Kant's third *Critique*, there is an even more ambitious self-overcoming of the limits of the understanding by the understanding – or at least by "thinking" – itself. There Kant emphasizes that we can not only *think* (form the concept) of *another* "higher", divine species of understanding (cf. §§ 76–77), but that we have reason to *believe* in (affirm, hold-true) its existence (cf. § 91). Kant's account of the intuitive intellect, and its instantiation in the divine mind, is quite subtle and complex, and has fortunately been treated at length elsewhere.[28] All that is crucial for our purposes is that Kant's account of this understanding implies that neither its activity nor the content of this activity would be constituted in the same fashion as that of our own understanding. The activity of the intuitive understanding would differ insofar as it would not be unified according to certain forms (functions), because it would be absolutely simple. As Kant puts it in his lectures on religion, God's knowledge will be the "knowledge of the simple understanding [*scientia simplicis intelligentiae*]" (Ak. 28, p. 1053–1054) because God will "intuit all things immediately through its understanding

26 Compare Hegel's complaint that Kant's starting-point for the metaphysical deduction is merely "empirical" (cf. Sedgwick 2012). J. F. Fries, by contrast, attempted to furnish a pure psychological foundation for logic and hence for Kant's transcendental philosophy more generally (cf. Beiser 2015).

27 Again replacing "function" with "form"; see note above.

28 See Gram 1981, Förster 2002, and Nuzzo 2009.

and cognize everything at once [*Alles auf einmal*]" (Ak. 28, p. 1051). The content of such an act will differ since it will not involve our pure concepts. Kant claims in the B-Deduction that such concepts only have significance for understandings like ours; for such an intuitive understanding, "the categories would have *no* significance at all" (B 145; my ital.).[29] In fact, Kant makes the even stronger claim in the third *Critique* that, for this sort of understanding, "concepts [...] would fall away [*wegfallen*]" altogether (§ 76, Ak. 5, p. 402).[30]

This achievement of the thought of the intuitive understanding has important consequences for Kant's conception of the relation between logic and ontology. The first and most immediate consequence is that it introduces an even sharper gulf between the findings of both traditional and transcendental logic, on the one hand, and any genuine cognition of objects "in themselves", on the other. This is because this alternate, divine understanding (if any) *would* know things as they genuinely are: while "we cognize only the appearances", "God cognizes *things in themselves*" (Ak. 29, p. 833; my ital.). Yet as we have seen, God's way of cognizing things does not go "through concepts", because God's understanding is not discursive but intuitive (Ak. 5, p. 406). But then genuine cognition of things as they are in themselves is simply not a cognition in terms of concepts. Hence, the transcendental logical principles that govern concepts would also not apply directly to the divine cognition of things in themselves. Furthermore, anything that would require concepts to be represented – i.e., any marks or properties "common [*gemein*]" to several things (cf. B 377), including even very basic, elementary, "universal" ones like those represented by the categories as pure concepts – would simply not be things that God cognizes or could even represent (since he would have to make use of concepts to do so). Or more precisely, what cannot be represented by God does not genuinely exist, because God cognizes all and only what is; the semblance that there really "are" marks or properties – presumably even the universal ones, such as: being an object – would itself ultimately "fall away".[31]

---

29 Such an understanding would "cognize its object *not discursively through categories* [i.e., not through pure concepts] but intuitively" (B 311; my ital.).

30 Compare: "our understanding cannot cognize things other than through certain general marks [*allgemeine Merkmale*]; but this is a limitation of the human understanding and this cannot occur in God" (Ak. 28, p. 996); cf. Ak. 28, pp. 1017 and 1051.

31 This likely lies behind Kant's remark in a lecture that there are no "universal things [*entia*]", but rather only *concepts* of things: "an *ens universale* cannot be thought" (Ak. 28, p. 560). This is directly in contrast to some of the Leibnizians, such as Baumgarten, who accept that there are both universals "*post rem*" but also "*in re*"; cf. *Metaphysica* § 149, Ak. 17, p. 57. Moreover, for Baumgarten, since universals are among "what is", God can and must somehow know them as well. In this way, our thinking retains an intellectual community with divine thought. For

Because our thinking consists in representing through concepts, it follows from the foregoing that, for Kant, there is very little – perhaps nothing at all – for us to say positively about whatever it is that the higher understanding *would* represent in its alternative manner, or how this X (whatever it may be) would relate to what we ourselves are thinking of by representing this same X as bearing instances of common properties. Compare Kant's own characterization, at several places, of "the object corresponding to and therefore distinct from the cognition" of it by our understanding, as something which "must be thought of only as something in general [*etwas überhaupt*] = X" (A 104; cf. A 109). Likewise, Kant describes the ultimate object to which appearances are related by our understanding as a "something = X of which we *know* [wissen] *nothing* at all nor *can* know anything in general" – adding parenthetically that this impossibility is due to "the current constitution [*Einrichtung*] *of our understanding*" (A 250, my ital.). In the B-edition, Kant describes "the representation of an object in itself [*an sich selbst*]" that we form of that which lies beyond an appearance – or as he here describes it, the representation of the "object in a relation [*Gegenstand in einer Beziehung*]" (i.e., in a relation to our sensibility) but "outside of [*außer*] this relation" – as "an entirely *indeterminate* [*ganz* unbestimmte] concept of a being of understanding, as a something in general [*Etwas überhaupt*] outside of our sensibility" (B 306–307; cf. Ak. 4, pp. 315, 351).

The thrust of these and other passages would seem to be that our own thinking of whatever it is that is ultimately correlated with our cognition is so radically "indeterminate" that we cannot even affirm that this X has the basic kind of categoriality that is represented by the most "elementary" concepts of our understanding.[32] Indeed, Kant appears to explicitly assert as much at the outset of the Schematism, claiming that the pure concepts "*cannot* pertain to things in themselves *at all* [*auf Dinge an sich* gar nicht *gehen* können]", and, even more stringently, that for such a domain, "concepts are entirely *impossible*" (B 178; my ital.).[33]

Kant, by contrast, the fact that our understanding proceeds only via common properties is a result not only of our finitude but also indicative of a more radical gulf separating us from both the activity and content of the divine mind; at best Kant could accept that we share the same object – or perhaps better expressed: we relate to the same " = X" (cf. below).

32 For some discussion of just how indeterminate this is, and how "agnostic" it should leave us (even, e.g., as to the quantity (singular? plural?) of the X), see Ameriks 2003, pp. 24, 29, and 83–84 – though Ameriks himself claims that such agnosticism "cannot be the last word" (24).

33 It is therefore unclear whether Kant is ultimately entitled to retain even minimal characterizations of this X as a "thing" or even a "something", since even the concepts of a thing and of something are, of course, *concepts*, cf. Cowling 2010.

§ 6 Conclusion: from discursive to speculative logic

As a consequence of his belief in the divine understanding, Kant would seem, then, to be also committed to believing that not only the contents of our sensibility (appearances), but also the contents of our understanding (concepts) are ultimately "transcendentally" ideal rather than real.[34] In both cases, these contents ultimately relate us to some " = X" which does not have a form or structure corresponding to that of our concepts.

Considerations along just these lines led Hegel to criticize Kant for making everything we represent in thought into something that can have only "subjective", and never any "objective", validity.[35] They also led Hegel to claim, however, that Kant's own thinking about thinking already implicitly contains the seeds for its own overcoming, since the articulation of the concept of a higher understanding is something even Kant recognizes can be achieved *by the thinking of our own allegedly lower understanding itself*. This self-overcoming of the alleged limitation of thinking is something Hegel took to signal the need to fully reconceive, from the ground up, the very conception of thinking which had been re-

34 Maddy, for one, embraces this conclusion, claiming explicitly that "logic is transcendentally *ideal*" because "it reflects features of the world as it is (partly) constituted by our cognitive machinery, rather than features of the world as it is in itself" (Maddy 1999, p. 106). Maddy's argument for this conclusion, however, does not bring in the divine intellect, and so ultimately does not absolutely block the possibility that logic might *also* (somehow) apply to the world "in itself". Instead, Maddy tries to get to the ideality of logic directly from the fact that logic is about our discursive intellect *rather than* about the world as it is in itself. The relevant conclusion cannot follow quite this directly, however, because Kant *does* accept that the contents at issue in transcendental logic *can* be shown to apply to at least *some* objects that lie beyond or outside of concepts – namely, *appearances*. Of course, these items are themselves merely "ideal", yet like the "world as it is in itself", they are not already contained "in" the concepts of the discursive understanding itself. Hence, the mere fact that something is not already "in" the discursive intellect does not mean that logic cannot *also* somehow characterize or apply to this thing, or that it cannot be *demonstrated* to do so.

35 For two recent and insightful interpretations and defenses of Hegel's criticisms of Kant on this front as apt, see Bristow 2002 and especially Sedgwick 2012. Kant can still insist, however, that the contents of thought, like appearances themselves, are not completely subjective, since they are, after all, ways of *relating* to this X, whatever it is. For an analysis of appearances along these lines, in terms of object-dependent relations linking our mind to some unknown *relatum*, Tolley forthcoming; compare Rosefeldt 2007. For further worries about leaving Kant with "a *bad* version of a global idealism", compare Ameriks 2003, p. 135–136; see also Quarfood 2010, esp. p. 152–153.

sponsible for the official outlines of Kant's philosophy of logic in the first place. The science of thinking – *logic* according to its traditional denomination – must now include the "speculative" doctrine of this infinite intellect and its fundamental relation to being. And since this infinite thinking provides the ultimate ground for being itself (including the ground of the being of our own allegedly finite intellect), the science of this thinking will itself provide the science of the being which it is responsible for grounding or determining – that is, this new logic will "coincide [*fällt zusammen*] with" metaphysics and *ontology* itself, as Hegel himself proclaims (Hegel 1971, vol. 8, p. 81). Logic becomes the science of this higher understanding: "the presentation of God as he is in his eternal essence before the creation of nature and a finite spirit" (Hegel 1971, vol. 5, p. 44). Whether Kant could have ever followed Hegel down this speculative path is another story.[36]

References

Ak. | Kant, Immanuel (1900–): *Gesammelte Schriften*. Königlich Preußische Akademie der Wissenschaften (ed.). 29 vols. Berlin: De Gruyter.

Adams, Robert (1997): "Things in themselves". In: *Philosophy and Phenomenological Research* 57, No. 4, pp. 801–825.

Allison, Henry ([2]2004): *Kant's Transcendental Idealism*. New Haven, London: Yale University Press.

Ameriks, Karl (1985): "Hegel's Critique of Kant's Theoretical Philosophy". In: *Philosophy and Phenomenological Research* 46, No. 1, pp. 1–35.

Ameriks, Karl ([2]2000): *Kant's Theory of Mind*. Oxford, New York: Oxford University Press.

Anderson, Lanier (2015): *The Poverty of Conceptual Truth*. Oxford, New York: Oxford University Press.

Baumgarten, Alexander ([7]1779): *Metaphysica*. Halle: Hemmerde.

Baumgarten, Alexander ([2]1773): *Acroasis logica*. Halle: Hemmerde.

Beck, Lewis White (1969): *Early German Philosophy*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

Beiser, Frederick (2015): *The Genesis of Neo-Kantianism*. Oxford, New York: Oxford University Press.

Boehm, Omri (2014): *Kant's Critique of Spinoza*. Oxford, New York: Oxford University Press.

Bristow, William (2007): *Hegel and the Transformation of Philosophical Critique*. Oxford, New York: Oxford University Press.

36 Thanks to audiences at UNLV, Northwestern, Notre Dame, and the German Philosophy Research Group at UCSD, along with Lucy Allais, Stefanie Grüne, Thomas Land, Samantha Matherne, Matthew Shockey, Eric Watkins, and Marcus Willaschek, along with an anonymous referee, for helpful feedback and comments on earlier drafts of this material.

Cowling, Samuel (2010): "Kantian Humility and Ontological Categories". In: *Analysis* 70, No. 4, pp. 659–665.
Dutilh Novaes, Catarina (2011): "The Different Ways in which Logic is (said to be) Formal". In: *History of Philosophy of Logic* 32, No. 4, pp. 303–332.
Dyck, Corey (2014): *Kant and Rational Psychology*. Oxford, New York: Oxford University Press.
Förster, Eckart (2002): "Die Bedeutung von §§76–77 der ‚Kritik der Urteilskraft' für die Entwicklung der nachkantischen Philosophie". In: *Zeitschrift für philosophische Forschung* 56, No. 2, pp. 169–190.
Goldfarb, Warren (2001): "Frege's Conception of Logic". In: Floyd, J./Shieh, S. (eds.): *Future Pasts*. Oxford, New York: Oxford University Press, pp. 25–41.
Gram, Moltke (1981): "Intellectual Intuition: The Continuity Thesis". *Journal of the History of Ideas* 42, No. 2, pp. 287–304
Hegel, G. W. F. (1971): *Werke in 20 Bänden*. Moldenhauer, E.; Michel, K. M. (eds.). Frankfurt/Main: Suhrkamp.
Heimsoeth, Heinz (1924): "Die metaphysischen Motive in der Ausbildung des kritischen Idealismus". In: *Kant-Studien* 29, pp. 121–159.
Hogan, Desmond (2009): "Three Kinds of Rationalism and the Non-spatiality of Things in Themselves". In: *Journal of the History of Philosophy* 47, No. 3, pp. 355–382.
Kant, Immanuel (1992–): *The Cambridge Edition of the Works of Immanuel Kant*. Guyer, Paul; Wood, Allen (eds.). Cambridge: Cambridge University Press.
Lu-Adler, Huaping (2013): "Kant on the Object and Formal Truth of Analytic Judgments." In: *History of Philosophy Quarterly* 30, No. 2, pp. 177–193.
Longuenesse, Béatrice (1998): *Kant and the Capacity to Judge*. Princeton, N. J.: Princeton University Press.
Macfarlane, John (2000): *What does it mean to say that logic is formal?* University of Pittsburgh, Dissertation.
Macfarlane, John (2002): "Frege, Kant, and the Logic of Logicism". In: *Philosophical Review* 111, No. 1, pp. 25–65.
Maddy, Penelope (1999): "Logic and the Discursive Intellect". In: *Notre Dame Journal of Formal Logic* 40, No. 1, pp. 94–115.
Meinong, Alexius (1904): "Über Gegenstandstheorie". In: Meinong, A. (ed.). *Untersuchungen zur Gegenstandstheorie und Psychologie*. Leipzig: J. A. Barth, pp. 1–50.
Nuzzo, Angelica (2009): "Kritik der Urteilskraft, Par. 76–77". In: *Kant Yearbook* 1, No. 1, pp. 143–172.
Pichler, Hans (1910): *Über Christian Wolffs Ontologie*. Leipzig: Dürr.
Quarfood, Marcel (2011): "Discursivity and Transcendental Idealism". In: Schulting, D./Verburgt, J. (eds.): *Kant's Idealism. New Interpretations of a Controversial Doctrine*. Dordrecht: Springer, pp. 143–158.
Rosefeldt, Tobias (2007): "Dinge an sich und sekundäre Qualitäten". In: Stolzenberg, Jürgen (ed.): *Kant in der Gegenwart*. Berlin: De Gruyter.
Rosenkoetter, Timothy (2008): "Are Kantian Analytic Judgments about Objects?". In: Rohden, Valerio/Terra, Ricardo R./Almeida, Guido Antonio/Ruffing, Margit (eds.): *Recht und Frieden in der Philosophie Kants*. Berlin: De Gruyter, pp. 191–202.
Russell, Bertrand (1918): "The Philosophy of Logical Atomism IV". In: *The Monist* 29, pp. 47–63.

Schafer, K./Stang, N. (eds.) (forthcoming): *The Sensible and Intelligible Worlds*. Oxford, New York: Oxford University Press.
Sedgwick, Sally (2012): *Hegel's Critique of Kant: From Dichotomy to Identity*. Oxford, New York: Oxford University Press.
Sher, Gila (1991): *The Bounds of Logic*. Cambridge, MA: MIT Press.
Sider, Ted (2012): *Writing the Book of the World*. Oxford, New York: Oxford University Press.
Stang, Nicholas (2016): *Kant's Modal Metaphysics*. Oxford, New York: Oxford University Press.
Tolley, Clinton (2012a.): "The Generality of Kant's Transcendental Logic". In: *Journal of the History of Philosophy* 50, No. 3, pp. 417–446.
Tolley, Clinton (2012b): "Bolzano and Kant on the Nature of Logic". In: *History and Philosophy of Logic* 33, No. 4, pp. 307–327.
Tolley, Clinton (2013): "Kant on the Generality of Logic". In: Ruffing, M. et al. *Proceedings of the 11th International Kant Congress* Vol. 2. Berlin: De Gruyter, pp. 431–442.
Tolley, Clinton (forthcoming): "Kant's Appearances as Object-Dependent Senses". In: Schafer, K./Stang, N. (eds.): *The Sensible and Intelligible Worlds*. Oxford, New York: Oxford University Press.
Watkins, Eric (2002): "Transcendental Idealism and the Categories". In: *History of Philosophy Quarterly* 19, No. 2, pp. 191–215.
Watkins, Eric (2005): *Kant and the Metaphysics of Causality*. Cambridge: Cambridge University Press.