

RH: Kant's Account of Cognition

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Abstract: In this paper, we offer an overview of the basic structure of Kant's account of cognition, of the conditions on the notion of cognition most central to the first *Critique*, and how they are satisfied in the case of human beings. Our primary aim in this regard is to provide a comprehensive (albeit not exhaustive) framework for understanding Kant's account of (theoretical) cognition. In the course of doing so, we argue for various interpretative claims, which, taken together, amount to a novel understanding of Kant's account of cognition. First, we argue that cognition is a mental state that determines a given object by attributing general features to it. Second, we explain what it means for Kant for an object to be given; givenness in the relevant sense involves an immediate relation to an existing object. These first two claims imply that cognition (*Erkenntnis*) is distinct from knowledge (*Wissen*), both in Kant's sense and in our modern sense. Third, we note some fundamental ambiguities about what sensibility and understanding are, and point out that purely causal interpretations of these faculties are

problematic. Fourth, we distinguish between an intuition and an intuitive representation (analogous to the distinction between a concept and a discursive representation) in such a way that an intuition is one specific kind of intuitive representation. Fifth, we describe two different accounts of concepts ('logical' and 'psychological') and explain how they complement each other (despite their distinctness). Sixth, we diagnose several confusions regarding whether Kant is or is not a non-conceptualist about intuitions (though without attempting a definitive resolution to that debate). Finally, we show how our analysis of cognition clarifies what the most promising lines of argument are for Kant's claim that we cannot have cognition of the objects of traditional metaphysics (while still allowing for limited kinds of knowledge of things in themselves).

Keywords: Kant, cognition, knowledge, things in themselves, representation, intuition, concept, sensibility, understanding, reason, metaphysics

Introduction

Kant's *Critique of Pure Reason* undertakes a systematic investigation of the possibility of synthetic cognition a priori so as to determine whether this kind of cognition is possible in the case of traditional metaphysics.¹ While much scholarly attention has been devoted to the distinction between analytic and

synthetic judgments as well as to that between the a priori and the a posteriori, less attention has been devoted to understanding exactly what cognition (*Erkenntnis*) is for Kant. In particular, it is often insufficiently clear what kind of mental state cognition is, what the exact nature of the conditions on cognition is, and how they are satisfied in the case of human beings. To bring greater clarity to these issues, we propose to investigate the nature of cognition along two different dimensions.

On the one hand, we think it useful to have a clear grasp of the basic structure of Kant's account of cognition, the conditions on the notion of cognition most central to the project undertaken in the first *Critique*, and how they are satisfied in the case of human beings.² Our primary aim in this regard is to provide a comprehensive (albeit not exhaustive) framework for understanding Kant's account of (theoretical) cognition.

On the other hand, we also argue for various interpretative claims, which, taken together, amount to a novel understanding of Kant's account of cognition. First, we argue that, according to the conception of (theoretical) cognition most central to the first *Critique*, cognition is a mental state that determines a given object by attributing general features to it. Thus, my awareness of a red ball in front of me as red or as a ball qualifies as cognition. Second, we explain what it means for Kant for an object to be given; givenness in the relevant sense involves an immediate relation to an existing object. These first two claims imply that cognition (*Erkenntnis*) is distinct from knowledge (*Wissen*), both in Kant's sense and in our modern

sense. Third, we note some fundamental ambiguities about what sensibility and understanding are, and point out that purely causal interpretations of these faculties are problematic. Fourth, we distinguish between an intuition and an intuitive representation (analogous to the distinction between a concept and a discursive representation) in such a way that an intuition is one specific kind of intuitive representation. Fifth, we describe two different accounts of concepts ('logical' and 'psychological') and explain how they complement each other (despite their distinctness). Sixth, we diagnose several confusions regarding whether Kant is or is not a non-conceptualist about intuitions (albeit without attempting a definitive resolution to that debate). Finally, we show how our analysis of cognition clarifies what the most promising lines of argument are for Kant's claim that we cannot have cognition of the objects of traditional metaphysics (while still allowing for limited kinds of knowledge of things in themselves).

We divide our investigation into five sections. In section 1, we explore Kant's various conceptions of cognition. In the sense most relevant to the first *Critique*, we take cognition to be a representation that determines a given object by attributing general features to it. It thus requires that the object be given (givenness condition) and determined, or thought, through concepts (thought condition). For human beings, objects can be given only through sensibility and thought only by the understanding. In section 2, we clarify Kant's notion of sensibility and the different kinds of sensible representations he envisions (such as intuitions), and explain how they allow

the givenness condition to be satisfied. In section 3, we turn to Kant's account of the understanding and its representations (concepts, judgments, and inferences) and distinguish between two complimentary accounts of concepts, both of which contribute to explaining how the thought condition can be satisfied.

In section 4, we consider how the givenness and thought conditions can be jointly satisfied by articulating two models of how sensibility and understanding cooperate to bring about cognition. On the one model, cognitions are judgments (and thus thoroughly discursive representations) in which concepts are applied to objects given in intuition. On the other model, cognitions are representations that have both intuitive and discursive aspects. Since these two models can apply to cognitions of different kinds, they can be seen as complementary accounts of how the givenness and thought conditions are satisfied. We then turn to the question of whether, for Kant, intuitions could represent objects without concepts, and suggest that once different senses of 'intuition' and 'representing an object' have been distinguished, at least some seemingly conflicting answers turn out to be compatible. Finally, in section 5, we consider reason as the faculty that is responsible for relations between cognitions in syllogisms and in natural science, and investigate the principled limits to our cognition in metaphysics. In these ways, we wish not only to highlight various aspects of Kant's account of cognition that are worth exploring in more detail, but also to convey that Kant's account of cognition is part of a highly differentiated

theory of mental representation that is much more complex and interesting than is commonly appreciated.

1. Cognition: Basic Distinctions

In this section, we first introduce different senses in which Kant uses the term ‘cognition’ (section 1.1) and then offer four brief remarks on the relations between (human) cognition and knowledge, its object, divine cognition, and the subject matter of the first *Critique* (section 1.2).

1.1. Different Senses of Cognition in Kant

In different passages throughout his corpus, Kant attributes a wide range of meanings to the term ‘*Erkenntnis*.’ For example, the so-called *Stufenleiter* passage in the first *Critique*, which provides a taxonomy of different kinds of representation, characterizes perception as “representation with consciousness” and cognition as “objective perception” (A320/B376).

According to this passage, a cognition is a conscious representation that represents an object.³ Taken in this broad sense, it explicitly contrasts only with sensation, which is not, as such, objective, and with any representation of which we are not conscious. Kant then seems to identify intuitions and

concepts as its species, with further subdivisions under concepts, in such a way that even an idea, which is defined as a concept of an object that cannot be given in possible experience, is classified as a cognition in this broad sense.

Kant provides another classification in the so-called *Jäsche Logik*, where he distinguishes seven degrees of cognition (*Jäsche*, 9:64–65).⁴ The first degree is mere representation, the second conscious representation, while the third is being acquainted with something (*etwas kennen*) and the fourth being acquainted with something with consciousness (*erkennen*, *cognoscere*). The fifth is to conceive (*intelligere*), or to represent through concepts of the understanding, the sixth to cognize through reason, while the seventh and highest degree of cognition is comprehension (*begreifen*, *comprehendere*), which is to cognize through reason a priori. Though all seven are degrees of cognition, Kant singles out the fourth by labeling it ‘*erkennen*.’

However, in various passages in the *Transcendental Analytic*, Kant identifies a narrower notion of cognition, according to which a cognition is a conscious representation of a given object and of (at least some of) its general features. Cognition in this sense arises when one determines an object given in intuition by applying a concept to it, as when one judges, or is conscious of, say, a ball in front of one as red. Kant has this notion in mind when he claims: “there are two conditions under which alone the cognition of an object is possible: first, **intuition**, through which it is given,

but only as appearance; second, **concept**, through which an object is thought that corresponds to this intuition" (A92/B125).⁵ Cognition in this sense requires two fundamentally distinct kinds of representations, *intuitions* and *concepts*. While intuitions relate *immediately* to *particular* objects as such, concepts relate to a potential multitude of objects *mediately* through marks, i.e. through features that objects can have in *common*.⁶ According to this passage, two conditions must be satisfied for cognition in this narrow sense. First, the object must be given, since cognition must actually latch onto an object, and intuition satisfies that condition insofar as it immediately relates to the object represented in the intuition. Second, the given object must be thought through concepts, since cognition must render the object intelligible, and concepts do so by representing the given object's features as general, i.e. features it has in common with other objects.⁷ In the following, we refer to these as the *givenness* and the *thought conditions*.

In line with the distinction between intuitions and concepts, Kant distinguishes between two faculties that are likewise different in kind, sensibility and understanding.⁸ Sensibility is said to be receptive or passive insofar as the mind must be "affected" (acted on) from without and is the faculty of intuitions, whereas the understanding is said to be spontaneous or active insofar as it is the faculty of concepts (and judgments).⁹ Kant famously claims that "[t]houghts without content are empty, intuitions without concepts are blind. . . . Only from their unification [viz. the unification of the understanding and of the senses] can cognition arise" (A51/B75–76). Thus it

is only through sensibility that objects are “given” in such a way that cognition refers, or can be shown to refer, to existing objects and represents their non-general features, and it is only through the understanding that (the general features of) objects can be “thought,” or “determined,” by discursive concepts. It is this narrow sense of cognition that Kant, in one place, calls “cognition in the proper sense [*Erkenntnis in eigentlicher Bedeutung*]” (A78/B103; cf. B149).¹⁰

Given the differences between these notions of cognition, Kant’s use of the term may appear inconsistent. However, we think that it reflects a genuine sensitivity on his part to the rich variety of kinds of representation that can be relevant in different contexts.¹¹ Further, despite this diversity, Kant’s primary focus in the first *Critique* is clearly on the narrower notion of cognition. For in the Transcendental Doctrine of Elements, which constitutes the bulk of the first *Critique*, he provides an analysis of the conditions of cognition in this sense. Specifically, in the Transcendental Aesthetic Kant provides an analysis of sensibility, showing how objects are given in sensible intuition, and in the Transcendental Logic, he offers an account of the understanding (i.e. our intellectual faculties, including reason), showing how objects can be thought through discursive concepts and involved in inferences of reason.

1.2. Clarificatory Remarks

Four general remarks about cognition in the narrow sense are in order. First, it is important to distinguish *cognition* (*Erkenntnis*) from *knowledge* (*Wissen*).¹² Kant understands knowledge as a mode of assent, or “taking to be true” (*Fürwahrhalten*), that is based on an objectively sufficient ground, that is, an objective justification that is sufficient for certainty (A822/B850) and truth (Jäsche, 9:66).¹³ Kant’s conception of knowledge is closely related to the traditional tripartite definition of knowledge as justified true belief since belief (in our current sense) is an instance of “taking something to be true” and an objectively sufficient ground is a kind of justification that secures truth. But knowledge in this sense is clearly fundamentally different from cognition. Since cognition is a conscious representation of a given object and its general features, it requires neither an act of assent nor an objective justification. Thus, I can have a representation of the ball in front of me as being red without endorsing the judgment “this ball is red,” since I might not have assessed the relevant evidence or I might have done so and (rightly or wrongly) believe it to be a white ball illuminated by red light. Conversely, Kant does not claim that knowledge requires that an object be given or that we attribute some general feature to it.¹⁴ Despite these basic differences, cognition could nonetheless contribute to the kind of objectively sufficient grounds required for knowledge, though Kant does not explicitly say so or argue for it.¹⁵

Second, in his explications of intuitions and concepts, Kant speaks of them “relating” to (*beziehen sich auf*) their objects, but without clarifying what specific kind of relation he intends. We suggest that intuitions and concepts relate to their objects both by *representing* them, i.e. having an objective representational content, and by *referring* to them.¹⁶ Below, we explain how each one represents and refers to objects and how cognition arises as a result.

Third, it is important to distinguish *human* cognition from (possible) *divine* cognition. Instead of having separate faculties of sensibility and understanding that make distinct contributions to cognition (through sensible intuitions and discursive concepts), the divine mind would have a single intuitive intellect that has cognition in an intellectual intuition—a representation that actively produces its objects, rather than having them be given from without, and that comprehends those objects immediately without the need for concepts.¹⁷ Accordingly, the distinction between sensibility and understanding is, for Kant, a consequence of the finitude of human minds, which manifests itself in both sensibility’s dependence on external causes (on “affection” and on objects being given to it from without (B72)) and the understanding’s discursivity (the generality of its concepts and their dependence on sensible representations).¹⁸

Finally, cognition in the narrow sense is central to the subject matter and goal of the first *Critique*. The question that motivates Kant to undertake a critique of pure reason is whether the claims of traditional metaphysics put

forward by his rationalist and empiricist predecessors concerning God, the immortality of the soul, and freedom could be synthetic cognitions a priori. As it turns out, providing a satisfying explanation of synthetic a priori cognition requires not only a thorough investigation of the givenness and thought conditions on cognition, but also a “revolution [*Umänderung*] of our way of thinking.” The revolutionary idea is not just that human cognition has sensible and intellectual conditions, but also that the sensible conditions are *merely subjective* (in that nothing corresponds to them in the objects) and are “put into” the objects by the cognizing subject, with the result that the objects of cognition are “mere appearances” rather than “things as they are in themselves” (Bxviii). That is, the distinction at the heart of Transcendental Idealism is required because synthetic a priori cognition is possible only if the objects of human cognition are not things in themselves, but appearances. Thus, both the necessity of Transcendental Idealism and the fate of metaphysics rest on the possibility of cognition in the narrow sense.¹⁹

2. Sensibility, Intuition, and the Givenness Condition

Kant describes sensibility as a receptive or passive faculty through which objects are given to us in intuition, where an intuition is a *singular* representation that relates *immediately* to particular objects. According to Kant, objects must be given to be cognized and they cannot be given

through a discursive understanding (A19/B33). This basic position gives rise to several fundamental questions about the givenness condition. What exactly does it mean for an object to be given (section 2.1) and how is one to understand sensibility (section 2.2), sensations (section 2.3), and sensible intuitions—specifically, their singularity and immediacy (section 2.4), their form and matter (section 2.5), and their intuitive character (section 2.6)—in such a way that they can contribute to cognition by allowing the givenness condition to be satisfied?

2.1. Givenness

Kant never defines what it means for an object to be given,²⁰ but his usage suggests that an object is given if and only if the object is present to mind so as to guarantee that one's representation refers to it, and to make it possible to represent that particular object and (some of) its non-general features. In the human case, objects can be given only through sensibility, which can occur either when the object "affects the mind in a certain way" (A19/B33) or when the mind constructs the object "in pure intuition" (A713/B741). While affection gives rise to sensations, which are required for empirical cognitions, the construction of objects in pure intuition is required for mathematical cognition.²¹ In both cases, the givenness of an object implies that the object exists.²² In this way, an object's being represented in intuition guarantees

that it is given, since the intuition allows one both to *refer* to the object and to *represent* its non-general features.²³

Kant also considers the possibility that objects are given to God through his own intuitive understanding (or intellect) rather than through sensibility (B135, B138–39, and B145).²⁴ Thus, Kant is committed to a generic sense of givenness (the object is present to mind in a way that guarantees the existence of the object and makes possible the representation of that particular object) that holds both for God and for human beings, and to a more specific sense according to which givenness for human beings includes, in the empirical case, an affection relation and a correspondingly receptive faculty of sensibility.

2.2. Sensibility

Understanding givenness in this way makes it natural to interpret the faculty of sensibility in causal terms. That is, it is tempting to think that objects are given to us because they in some sense *cause* representations in us and such a causal relationship allows us to represent and refer to the object that causes those representations. This interpretation is also suggested by Kant's repeatedly describing sensibility in terms of receptivity, passivity, and affection, all of which have causal connotations.

In addition, a causal interpretation can help to explain two distinctive features of *empirical* intuitions. First, it can explain how an empirical intuition is supposed to relate to a particular object, since an empirical intuition can both represent and refer to the object that affects it in virtue of the object being its cause. Kant's view would resemble contemporary causal theories of reference in this respect. Second, an intuition provides evidence of the existence of the object that caused it, since, in the empirical case, the intuition would not exist if the object did not cause it.²⁵

However, sensibility cannot be *purely* passive or receptive, because it must *produce* representations in response to being acted on from without. External objects do not generate representations that the human mind simply receives; instead, an object acts on the mind and the mind creates a sensible representation in response. Moreover, the case of mathematics shows that sensibility does not require any causal impact from external objects. For mathematical objects cannot cause sensations, though they are clearly sensible according to Kant. Since construction in a priori intuition shows that mathematical objects are present to the mind, Kant can stay true to his claim that all objects of cognition must be given through sensibility. As a result, a consistent understanding of sensibility cannot require affection.²⁶

In response, one could claim that the a priori intuitions involved in the construction of mathematical objects are sensible in a merely derivative sense. That is, even though mathematical cognition does not involve matter caused from without, it would be sensible in that the forms of intuition

involved in it are the same forms that take up sensations in empirical cognition. Yet such an interpretation can seem problematic, since by acknowledging both a derivative and a non-derivative sense of sensibility, it cannot offer a unified account of sensibility. Despite the drawbacks of this interpretation, it may well represent the default position.

However, one can explore other interpretive possibilities. In his *Inaugural Dissertation*, Kant contrasts his view with that of Leibniz, Wolff, and Baumgarten by pointing out: “sensitive [or sensible] representations can be very distinct and representations which belong to the understanding can be extremely confused” (*Inaugural Dissertation*, 2:394). When we see, e.g. a brightly illuminated red object, we can have a very lively and vivid representation of it and can easily distinguish it from others, even if it is unclear to us whether the concept “scarlet” or “crimson” applies. Given that Kant defines the clarity (*Klarheit*) of a representation in general as consciousness of the difference between it and other representations (B415n), this example shows that the clarity of a representation that Kant calls sensitive (*sensitivum*), or sensible (*sinnlich*), is distinct from the discursive clarity of concepts.²⁷ As a result, one might define sensibility as the faculty of representations that can admit of the kind of clarity that is on display with the brightly illuminated object. Whether the textual evidence suffices to sustain such an interpretation is unclear.²⁸ However, it would have the virtue of allowing for an account of sensibility that applies univocally to our representations of empirical and mathematical objects while not

precluding the possibility that some sensible representations are caused by external objects.

2.3. Sensations

Kant defines sensation as a conscious representation that “relates merely to the subject as a modification of its state” (A321/B377) and as “the effect of an object on the capacity for representation insofar as we are affected by it” (A19/B33). Given that a sensation refers only to how the subject is affected and not directly to the object, it is not surprising that Kant does not classify it as a cognition (e.g. in the *Stufenleiter* passage). However, since he does classify sensations as a kind of representation, they must, it seems, have *some* kind of representational content. Also, insofar as the difference between a priori and empirical cognition derives from sensations, sensations must play a crucial role in empirical cognition, and they could do so in virtue of their representational content.²⁹

At the same time, specifying the representational content of sensations is challenging. Since they are non-conceptual, their content cannot be general. Nor can their content be straightforwardly spatio-temporal, since space and time are forms of intuition that are distinct from sensations (as the matter of intuition). One might identify the content of sensations with raw feels. But insofar as raw feels are experienced at a

particular time, even they may be more than mere sensations in Kant's sense. Alternatively, one could stress that sensations represent not simply a subject's state, but also how the subject is affected by the *object*. This would make explicit that even though sensations are subjective and thus do not represent any object on their own, they are also not *purely* subjective since they have an *indirect* orientation towards an object.³⁰

Several further aspects of the representational content of sensations are relevant. First, reference to a particular object could be accounted for either by the causal link between a sensation and its object (noted above) or by the formal features of intuition (specifically, the spatio-temporal location the sensed object occupies) or both. Second, sensations must be involved in explaining our awareness of the existence of empirical objects. Much turns here on whether one thinks of sensations as representations of which one is conscious in everyday situations (like pains or pleasures) or whether one classifies such conscious sensible representations as empirical intuitions and thinks of sensations as posited on purely theoretical grounds.³¹

2.4. Intuition: Singularity and Immediacy

Kant claims that the givenness condition is satisfied not by means of sensation, but rather by means of intuition. But how exactly does an intuition help to satisfy that condition? As we saw above, Kant defines intuitions in

terms of their singularity and their immediacy.³² Intuitions are singular in at least two senses. First, an intuition is singular in that its representational content is particular rather than general and it refers to particulars rather than to universals.³³ In the human case, an intuition would represent particular sensible features of a particular object at a particular space-time location and it would refer to the particular that is at that location. Second, whereas the same concept can be used in a plurality of judgments, an intuition can occur only once. Put differently, while a concept (such as the concept of a ball) is essentially a *type* of representation that can be applied to different objects on different occasions, an intuition (such as the intuition of a particular ball) is essentially a *token* that depends, both in its existence and in its representational content, on (the causal relation to) its object.³⁴

Intuitions are immediate in that their reference is not mediated by any other representation that would refer to objects, such as concepts.³⁵ But how then can their relation to objects be positively characterized? Various proposals have been offered. One might understand intuition to involve a “direct presence to the mind,” taken in a phenomenological sense, where the directness of the phenomenal presence precludes any mediation.³⁶ Or one might take it to involve the kind of direct reference illustrated by demonstrative terms, which require a context of use (typically place, time, or person) to establish reference.³⁷

This account explains how an object can be said to be given in intuition. Specifically, the immediacy of intuition makes it possible for us

both to be immediately aware of the existence of an object and to represent its non-general features. For an intuition is singular in virtue of *representing* an object with particular sensible qualities at a particular location in space and time. In the case of the red ball, the intuition we form might be of a particular instance of sphericity and of redness existing at the same spatio-temporal location (though not, qua intuition, represented as red or spherical).³⁸ Further, an intuition can *refer* to its object directly because no (objective) representation mediates between the intuition and its object and because the intuition depends on the object for its existence.

2.5. Intuition: Form and Matter

This account draws heavily on a distinction between the form and matter of an intuition, where the form is claimed to be space and time and the matter, for empirical intuitions, is sensation.³⁹ But what exactly is the relation between the form and matter of an intuition? One might think of sensations as the parts of an intuition and of space and time as the way in which these parts are ordered into a whole. However, an empirical intuition involves an empirical content that cannot be reduced to the contents of sensations arranged into a spatio-temporal whole. The redness of the ball represented in intuition does not derive from literally red sensations, since the representation of red already has spatial content. Insofar as the matter of an

intuition provides the parts for an intuition, the representational content of the parts must, it seems, not remain unaltered by being taken up into an intuition. Similarly, the form does not merely rearrange the (representational content of) sensations, but rather construes them as standing in specifically spatio-temporal relations, which suggests that the form of intuition adds distinctive content to the representational content of the intuition.

One may take guidance here from the way Kant aligns the matter-form distinction with the determinable-determination distinction (e.g. at A266/B322). In general, Kant holds that the form determines the matter, and the matter is determinable by the form. Further, Kant claims that for concepts the matter precedes the form insofar as something must be given before the concept can determine it, while for intuitions the form precedes the matter (A267/B323). For human intuition, then, the forms of space and time must determine the determinable sensations that are caused in us. This suggests that an intuition has a determinate spatio-temporal content only by the forms determining the sensations. By contrast, the matter makes two contributions. First, the matter of an empirical intuition must make accessible to the mind the existence of an object, leaving the object's general features undetermined. Second, even if the representational content of an intuition does not derive exclusively from its matter, the latter must somehow constrain how it is determined by the form.

2.6. *Intuitive vs. Discursive Representation*

Kant distinguishes not just between intuitions and concepts, but more generally between intuitive and discursive representations.⁴⁰ Kant typically explains “discursive” representations in terms of their generality,⁴¹ which suggests that “intuitive” representations are singular.⁴² As we discuss in section 3.2 below, because discursive representations are general, the relation between them and their parts is one of logical containment. By contrast, the containment relation that holds for intuitive representations must be mereological. The distinction between sensible and discursive clarity mentioned above (Section 2.2) reflects this difference in the structure of intuitive and discursive representations; indeed, Kant often speaks of “intuitive clarity” instead of “sensible” or “aesthetic” clarity (*Deutlichkeit*) (cf. Axvii). Relatedly, a contrast that Kant emphasizes with respect to intuitions and concepts might also hold for intuitive and discursive representations more generally; intuitive representations would contain parts that are themselves intuitive representations, and are thus infinitely divisible and “fine-grained,” while discursive representations contain only finitely many parts, which in turn are discursive representations.⁴³

Since judgments and inferences are clearly types of discursive representations beyond concepts, one might wonder whether Kant allows for intuitive representations beyond intuitions (as defined e.g. at A19/B33). And indeed, Kant’s use of the term ‘intuitive representation’ at least suggests an

affirmative answer in some cases.⁴⁴ For instance, he denies that “every intuitive representation of outer things includes at the same time their existence, for that may well be the mere effect of the imagination” (B278).⁴⁵ If givenness requires the existence of the given object and if objects are given in intuitions, then these “intuitive representations” of the imagination cannot be intuitions. Admittedly, Kant occasionally speaks of “intuitions of the imagination” (e.g. 5:254; cf. 7:167), but this may reflect the fact that he often does not distinguish between intuitive representations and intuitions proper or, alternatively, that he allows for different kinds of intuitions.⁴⁶

In sum, if intuitive representations are characterized by their particularity, their infinite divisibility (‘fine-grainedness’), or their specific kind of clarity and distinctness, there could be intuitive representations beyond intuitions proper. Note that while no representation could be both an intuition and a concept, Kant could allow for representations that are both intuitive and discursive (i.e. combine intuitive and discursive features).

3. Understanding, Concepts, Judgments, and the Thought Condition

Kant describes the understanding as an active or spontaneous faculty through which objects are thought, or determined, by concepts in judgments. A concept is a general representation that relates to potentially many objects mediately (by intuitions and/or marks) and a judgment is a combination of

concepts that can be a premise or conclusion in a syllogism.⁴⁷ Since objects, to be cognized, must be thought, or rendered intelligible, and they cannot be thought through sensibility, the (human) understanding must determine an object by applying a concept to what is given in sensible intuition in such a way that its general features can be thought.⁴⁸ Yet it is possible to apply a concept to an object only if the concept has what Kant calls “objective reality,” or, equivalently, only if the object represented by the concept is “really possible” (as opposed to being merely logically possible). But how exactly does the understanding satisfy the thought condition by means of concepts and judgments? To answer this question, we explain the spontaneous and discursive nature of the understanding (section 3.1), two different aspects of concepts, namely their two-fold ability to classify objects and represent inferentially structured content and their role in combining sensible representations (section 3.2), the contribution these aspects make to concepts being indirect and general representations (section 3.3), and how the thought condition is satisfied by way of concepts (e.g. by establishing their objective reality) (section 3.4), and by objects being determined in judgment (section 3.5).

3.1. Spontaneity and Discursivity

Kant characterizes the understanding as spontaneity in contrast to sensibility's receptivity. However, it is unclear what he means by spontaneity. As we have seen (2.1), he cannot mean simply that the understanding is active, since sensibility, too, does not literally "receive" representations.⁴⁹ Also, he cannot just mean that the understanding is independent from causal input, because sensibility's a priori representations of space and time are independent from causal input as well.⁵⁰ Finally, it cannot mean that the activity of the understanding is arbitrary, since Kant insists that many concepts are not arbitrary (*Jäsche*, 9:141), but rather involve a moment of necessity (e.g. A78/B104).⁵¹ We suggest that the spontaneity of the understanding is best understood in terms of its being active in a *distinctive way*. Two aspects are particularly relevant. First, the understanding brings into its representations a specific kind of *unity*, and it does so spontaneously or "on its own" insofar as this unity does not derive from the senses, but from an act that Kant calls 'synthesis.' Second, representations of the understanding are rendered non-arbitrary by actions that, even when we are not conscious of them, can be explained on the model of the self-conscious following of a rule. Both aspects of spontaneity contribute to explaining the representational content and objective character of thought. That acts of synthesis unite a plurality of representations into the representation of an object accounts for the complex, but unified content of thought, while the fact that these syntheses are rule-guided and thus not arbitrary accounts for their objective (i.e. inter-subjectively valid) character.

Human understanding is also a *discursive* faculty; i.e. a faculty of cognition through discursive representations (A68/B93).⁵² Discursive representations such as concepts, judgments, or syllogisms are *general* representations that can involve logical containment-relations with other general representations; e.g. concepts contain other concepts (“marks”) in them by virtue of being contained *under* them (e.g. “spherical” is contained in “ball,”).⁵³ Such representations are *general* in that (1) they (or their partial representations) represent features that a plurality of objects could, in principle, have, and thus both classify (or group together) and refer to a potentially infinite number of objects and (2) they are repeatable representations so that the same concept, judgment, or syllogism can be thought at different times. Though Kant defines concepts as general and indirect representations,⁵⁴ which distinguishes them from intuitions, they, unlike judgments and syllogisms, can contain only other concepts.

3.2. *Two Accounts of Concepts*

Kant expands on his definition of concepts first by accounting for the content of, and the logical relations between, concepts in terms of their “marks” (*Merkmale*) and second by attributing to them a role in the “synthesis” of the manifold of sensible intuition.⁵⁵

Concepts, according to Kant, both contain “marks” and can themselves be contained in other concepts as marks (*Jäsche*, 9:58).⁵⁶ For example, the concept of a ball contains the marks “material object” and “spherical” and is itself contained in the concept “tennis ball.” Marks, in turn, are defined as general⁵⁷ and partial representations that serve as “grounds of cognition” of either objects or their representations (*Jäsche*, 9:58).⁵⁸ While a concept contains its marks *in* it, it in turn is contained *under* its marks (*Jäsche*, 9:95–96).⁵⁹ For example, “spherical” and “material” are contained in (the content of) the concept “ball,” which in turn is contained (as a special case) under both “spherical” and “material.” In this way, every concept is part of a hierarchy of inferentially related concepts that classify, or group together, objects that share a set of features. Because these containment relations are crucial to Kant’s account of syllogism (see section 5), we call this his “logical” account of concepts.⁶⁰

In other places, Kant describes the role that concepts play in acts of the “synthesis of a sensible manifold.” “Synthesis” in general is “the action of putting different representations together with each other and comprehending their manifoldness in one cognition” (A77/B103).⁶¹ Acts of synthesis can generate concepts (unity of marks), judgments (unity of concepts), or syllogisms (unity of judgments). While marks, concepts, and judgments are discursive representations, Kant also posits a synthesis of a manifold of representations that are “given” and do not result from a prior act of synthesis.⁶² Kant calls this manifold “the manifold of intuition” (e.g.

A120, B130, A145/B185) and, in the case of cognition a priori, “the manifold of pure intuition” (e.g. A78/B104).⁶³ Now according to Kant, concepts serve as “rules” for this kind of synthesis, by which he seems to mean that the way in which the sensible manifold is combined into one representation “corresponds to,” and is somehow modeled on, the unity of the marks combined in the concept.⁶⁴ Because this account of the role concepts play in acts of synthesis is part of his transcendental psychology, we call it Kant’s “psychological” account of concepts.

3.3. The Generality and Indirectness of Concepts

Distinguishing between these two accounts of concepts helps to explain how concepts are general, and in which sense they are indirect representations. While Kant simply presupposes the generality of concepts in the logical account,⁶⁵ the psychological account might provide an explanation of this feature of concepts. On this account, two acts of synthesis involve the same concept only if they proceed in accordance with the same rule and therefore result in the same kind of unity among a given manifold, even if the manifold varies. For instance, consider the concept of a body, which we use as a rule for the synthesis that combines representations of extension, impenetrability, shape, etc. Now the same rule that allows me to represent this ball as a body also allows me to represent that racket as a body. The

generality of concepts is thus a consequence of their being essentially *types* of representations, that is, representations that can contribute the same content on different occasions,⁶⁶ which in turn is a consequence of the spontaneity and discursivity of the understanding. Specifically, since concept-use is a rule-governed activity, the same rule can be used to synthesize different manifolds on different occasions in such a way that different objects can fall under the same concept.

Concepts are *indirect* in two senses, one of which Kant explains in terms of marks (A320/B377) and the other in terms of a concept's dependence on intuition (A19).⁶⁷ In the first (intensional) sense, a concept is an indirect representation by *representing* its objects by means of other representations, the marks contained in that concept. In the second (extensional) sense, if a concept can be used to synthesize a manifold of intuition, it can *refer* to objects indirectly by way of that intuition, since intuitions are the only representations that refer to objects directly.

3.4. The Two Accounts of Concepts as Complementary

Each account covers different, but equally important and, in fact, complementary aspects of concepts and contributes to the way in the thought condition can be satisfied by involving concepts.

According to Kant, concepts (even empirical ones) are discursive all the way down. They do not have a sensible representational content, but contain only marks (see *Jäsche*, 9:58). Therefore, they can (ostensibly) refer to objects only mediately, through intuitions. In the fundamental kind of case, a concept can refer to an object by being used as a rule for the synthesis of sensible representations. It is this role that provides concepts with “objective reality, i.e. a relation to objects” (e.g. B150). Concepts that cannot be used to synthesize a sensible manifold may still be said to *represent* something simply by virtue of the marks contained in them; but they do not *refer* to it in the way required to determine a given object (e.g. A155/B194).⁶⁸ Without this relation to sensible representations, concepts are “empty” and “without meaning and sense” and thus cannot contribute to satisfying the thought condition.⁶⁹

But the logical account is equally important for understanding how concepts allow us to satisfy the thought condition. The idea, very roughly, is that if something is represented as falling under a given concept, then that concept both represents the object as having a property that similar objects will have (so that they are thereby classified together) and brings inferential structure and thus an element of necessity to that representation (in the sense that if a concept applies to an object, then so will the concepts that are contained in it). Kant offers the following example of this latter feature: “the concept of body serves as the rule for our cognition of outer appearances” and thereby “makes necessary the representation of

extension, and with it that of impenetrability, of shape, etc.” (A106). Now extension, impenetrability, and shape are the marks contained in the concept of a body. Thus, cognizing something as a body makes it necessary that the given manifold be synthesized in accordance with the marks contained in that concept, excluding, for instance, that we cognize an “outer appearance” both as a body and as penetrable. *If* something is cognized as a body, *then* it must be cognized as impenetrable.⁷⁰ What the concept of a body thus contributes to this cognition is (1) an inferentially structured conceptual content in terms of its general features (body, impenetrability, etc.) and (2) a (conditional) necessity or non-arbitrariness in the way the manifold is synthesized.

Moreover, both the logical and the psychological accounts contribute to explaining how the thought condition for cognition can be satisfied. The logical account explains how concepts can render an object intelligible by representing it through marks which (1) attribute features to it that it can share with some objects and not with others and (2) locate it in a larger classificatory structure. The psychological account explains how concepts can have “objective reality,” that is, can be used to determine given objects, by showing how the classificatory role of concepts and their inferential relations can apply to the objects that are given in sensible intuition. While the logical account depicts concepts in terms of their containment-relations, the psychological account explains how concepts “latch on” to the world in such a way that containment-relations can apply to them.⁷¹

In sum, while the logical account explains how concepts can have both a classificatory role and an inferential structure, the psychological account explains how these features can apply to objects that can be given to us. Taken together, both accounts explain how concepts can render objects intelligible and thereby explain how the thought condition can be satisfied.

3.5. Judgment and Determination

A judgment, in the widest sense, is a conscious representation that unifies a plurality of representations under a concept (see 9:101; A68/B93). Since concepts can be used to unify a manifold of representations, concept-use and judgment, in this wide sense, coincide (A68/B93). In a narrower sense of the term ‘judgment,’ however, not all concept-use is judgmental. Kant provides an explicit definition of judgment as “the way to bring given cognitions to the objective unity of apperception,” contrasting it with (empiricist) conceptions according to which a judgment arises according to “laws of reproductive imagination” (B141). By invoking the unity of apperception, Kant is claiming that judgments are not simply representations related by psychological laws, but rather must have a specific internal structure (expressed by the copula) necessary for the kind of unity that allows reference to an object and thus a truth-value.⁷² Insofar as they are synthetic, judgments do not merely unite a plurality of representations, but

also *determine* some object through a concept.⁷³ It is in this sense that Kant describes cognition as a “*determinate* relation of given representations to an object” (B137, emphasis added).

Now Kant uses the term ‘determination’ in various senses. One particularly prominent use refers to the attribution of a property to an object in a judgment.⁷⁴ In this sense, a determinate judgment contrasts with an indeterminate judgment, which occurs through the “merely logical use of the understanding” (B128; cf. 4:475n.). In the former, a judgment determines the object by attributing a feature to the object and thereby excluding its opposite (cf. *New Elucidation*, 1:391).⁷⁵ In the latter, the judgment leaves the object indeterminate by not attributing either the one feature or its opposite to the object. Kant maintains (e.g. at *Jäsche*, 9:111) that all synthetic judgments involve the *determinate* use of concepts (or determinations) (cf. 20:268.), since the predicate concept, which expresses a determination, is “added” to the object referred to by the subject concept, while analytic judgments do not because, in paradigmatic cases at least, the subject concept already contains the predicate concept.⁷⁶ This “adding” cannot be merely quantitative, but rather consists in an act of predication, that is, in the simplest case, in thinking of the feature as being instantiated in an object.

4. Bringing Intuition and Concepts Together in Cognition

One of Kant's central insights is that even the simplest cases of cognition, such as cognizing something before one as a red ball, involve a representation that is much more complex than both his empiricist and rationalist predecessors had assumed, because it requires that the object be both *given to us* and *thought*. In finite beings, cognition thus involves contributions from two separate faculties, namely sensibility and understanding.⁷⁷ Sensibility establishes an immediate referential relation to empirical objects and affords a representation of their non-general (spatio-temporal) features and thereby satisfies the givenness condition.⁷⁸ For example, if an object acts on our sensibility, it gives rise to sensations in us, which allows us to refer to it and represent it and its (particular) color and shape.

But being aware of a red ball in its particular roundness and redness is not yet an awareness of it *as* round and red, i.e. of its having features it shares with other round and red objects and that differentiate it from rectangular and green things. Cognition requires that the object be *determined* by applying one or more concepts to it, which are complex representations consisting of various marks, each of which contributes to determining the object to which the concept is applied. By applying the concept 'ball,' I determine the object as spherical and material and thereby classify it with respect to all other objects. Thus, the contribution of the understanding is to lend *classificatory articulation* and *inferential structure* to

our cognitions and thereby to make the cognized object intelligible, satisfying the thought condition.⁷⁹

After having surveyed Kant's understanding of these faculties and how each contributes to satisfying the givenness and thought conditions, we can now explain how they cooperate in bringing about cognition as a complex representation (4.1). This will provide the background necessary to understand a recent debate about whether Kant is a conceptualist or a non-conceptualist about intuitions (4.2).

4.1. The Cooperation of Sensibility and Understanding in Cognition

Assuming that some object (e.g. a red ball) is given to us through sensibility and that we possess concepts (e.g. red, round, material object) to think it, how do intuition and concept come together in a cognition? Even if we restrict ourselves to singular cognition (such as "This ball is red"), one might think of it in two ways. First, it could consist in a judgment containing two or more concepts (e.g. 'ball,' 'red') related by a copula (e.g. 'is'). Its relation to intuition would consist (1) in the objective reality of the concepts (i.e. in the possibility of employing them in the synthesis of a sensible manifold) and (2) in there being an intuition of a red ball that allows that the subject concept of the judgment ('ball') refers to the object given in the intuition and that the predicate concept ('red') can then be applied to it through the judgment. In

this way, the same object that is given to us is also thought (determined through concepts). Although attributing this picture of (singular) cognition to Kant is not without its problems,⁸⁰ he may have this in mind when he says that judgments are mediate cognitions of objects (e.g. A68/B93). Let us call this the 'judgment model' of singular cognition.⁸¹

Second, one might think of singular cognition as akin to perceptual awareness of the existence and general features of objects, such as seeing something as being red and round. Such an awareness might be thought of as resulting from the synthesis of a given sensible manifold (say, of various color-sensations located in space) into the representation of an object (such as a red ball). Such a representation would have both intuitive and discursive aspects. As a kind of perceptual awareness, it would be intuitive (though not an intuition); as an awareness of general features, it would be discursive (though not a concept). It is in this sense that Kant can speak of the representation of a house as being "intuition and concept at the same time" (*Jäsche*, 9:33). In being a sensible representation of a *particular* house, it is intuitive; in representing its *general* features (e.g. its being a house), it is discursive. It may not be easy to understand how one and the same representation can be both intuitive and discursive, but assuming that we can form the representation of a particular object as exhibiting general features (as in the case of seeing something as a red ball), it is plausible to assume that there are such representations. Let us call this the 'perception model' of singular cognition.⁸² On this model, singular cognition consists in a

single representation that satisfies both the givenness and the thought condition (unlike the judgment model, which has one representation, judgment, satisfying the thought condition and another, intuition, satisfying the givenness condition).

The two models do not exclude each other, since they could hold for different cases. Moreover, the judgment model would presuppose the perception model, if the intuitive representation that underlies a judgment such as “This ball is red” must be a singular cognition in the sense of the perception model.

4.2. Conceptualism vs. Non-Conceptualism

Above, in section 2, we characterized intuitions as satisfying the givenness condition by, among other things, representing the particular features of objects, that is, by representing features of objects in a way that was not already conceptual. Now that we have Kant’s account of how the general features of objects are represented by way of concepts, we can consider the representational content of intuitions in more detail. Specifically, we can now examine the exact meaning of Kant’s claim that “intuitions without concepts are blind” and thus are not cognitions (A51/B75–76). Different analyses of this claim reflect fundamentally different readings of Kant’s account of intuition.

As a first approximation, we can distinguish two possible interpretations: (1) Intuitions without concepts are not cognitions in the narrow sense, but could be cognitions in the broader sense of “objective representation” because they represent particular objects (without representing them as having general features). (2) Intuitions without concepts are not even cognitions in the broader sense, since they do not represent objects at all.⁸³ Let us call the first interpretation the non-conceptualist and the second the conceptualist one.⁸⁴ Note that the conceptualist does not have to deny *all* non-conceptual representational content, since sensations may well have representational content (see 2.3). Instead, the question is whether intuitions can represent objects without concepts.

The non-conceptualist answer can be motivated textually by Kant’s definition of an intuition as a singular immediate representation (A320/B377), by his claim in the *Stufenleiter* passage that intuitions are cognitions (in the broad sense) (A320/B377), and by passages in which Kant says that intuitions (and sensibility) do not require any activity of the understanding (e.g. A89–91/B122–23, A21/B35). It can also be motivated philosophically by considerations such as the “fine-grainedness” of perceptual experience (that seems to outstrip our means of conceptual articulation) and the idea that we seem to share our basic perceptual capacities with “babes and brutes” who lack concepts but still seem to be able to represent objects in some primitive sense.

The conceptualist answer, by contrast, can be motivated by other passages (e.g. A253/B309), as well as by considerations deriving mainly from the Transcendental Deduction. There, Kant argues that a representation can relate to its object only if the manifold included in that representation falls under the unity of apperception (B137), which in turn requires that it be unified in accordance with the categories (B143).⁸⁵ The conceptualist reading can also be supported by general philosophical considerations, such as the intelligibility of perceptual content and its availability to rational thought (as a reason for belief) that can be provided only by concepts.

Given this situation, the issue cannot be decided by quoting individual passages, but only by developing comprehensive interpretations of Kant's claims and an overall strategy in which the conflicting passages and considerations can be integrated.⁸⁶ It is not our aim here to develop such an interpretation, nor to survey the vast literature on the topic, but rather to clarify a few of the interpretive options by distinguishing issues that are sometimes run together.⁸⁷

One such issue concerns the different possible representational contents of an intuition. Consider two possibilities of what an intuition might be:

<ext>

(R1) the visual representation of a particular instance of redness located at a particular space and a particular time (cf. A20/B34, A23/B38);</ext>

<ext>

(R2) the visual representation of something as a red ball (cf. B143).

</ext>

While (R1) would be an intuition in a non-conceptualist sense, (R2) would be an intuition in a conceptualist sense.

Corresponding to these different views of the representational content of an intuition are different conceptions of what it means for a representation (*R*) to represent an object (*O*).

<ext>

(O1) *R* represents *O* by virtue of visually representing a particular instance of *F*ness (e.g. being red). (*O* is an object in the thin sense in that it consists only in the instantiation of one particular property.)

</ext>

<ext>

(O2) *R* represents *O* by virtue of visually representing it *as being F and G*. (*O* is an object in the thick sense in that it is a distinct object and its co-instantiated properties are general.)⁸⁸

</ext>

Some of the dispute between the conceptualist and the non-conceptualist might derive from lack of clarity about what is involved in representing an object ((O1) as opposed to (O2)), specifically, from whether the thin sense of object involved in (O1) is robust enough to count as an object. However, confusion can also arise from the fact that (R1) and (R2) are not the only possible descriptions of intuitions. Thus, the representational content of an intuition might involve not only one particular property, but two properties that are instantiated at the same location at the same time (redness and roundness) (R1*). Or it might involve not only the instantiation of one or more properties, but also their instantiation by an object that is in some sense distinct from the properties (something that is red or round) though still without the properties being explicitly represented as general (R1**). In both cases, the representational content of the intuition would have a unity that is more complex than that of (R1) but that falls short of (R2). Similarly, one can conceive of different senses of representing objects (O1*) and (O1**) corresponding to (R1*) and (R1**) that would not be as thin as (O1), but also not as thick as (O2).⁸⁹ With these (and even finer-grained) distinctions in hand, participants in the debate may be able to clarify what exactly they mean in asserting or denying that an intuition can represent objects without concepts.⁹⁰

However, a further lack of clarity might arise from not distinguishing between two roles a concept might play with respect to an intuition. On the one hand, the concept might be applied in such a way that its content is

included in the representational content of the intuition. On the other hand, the concept might play a role in the formation of the intuition, but without its content being included in its representational content. Now one might think that an intuition is formed by the faculty of sensibility alone. Accordingly, the sensations that constitute the matter of an intuition might be united by the forms of intuition in such a way that an intuition represents a spatiotemporal array of particular property-instances at different locations in space at a given time, just as (R1) would have it. Specifically, the senses, rather than any other faculty, are responsible for the “synopsis” (A94, A97) that causes the unity that is present in (R1).

Yet Kant frequently refers to various kinds of additional syntheses that involve the imagination (rather than those that involve the understanding): the “synthesis of apprehension” (A98–100) and “synthesis of reproduction” (A100–102) in the A-deduction, the “figurative synthesis (*synthesis speciosa*)” in the B-deduction (B151) and the synthesis involved in what Kant calls “the schematism,” which consists in “providing a concept with its image” (A140/B179). Setting aside the complicated interpretative questions connected with these passages, the common idea seems to be that the application of concepts to objects given through sensibility presupposes a logically *prior* synthesis of the sensible manifold *in accordance with* the categories that Kant attributes to the imagination and that results in an *intuitive* representation of an object. Such a representation would involve a unity that does not derive entirely from the senses, namely the unity of

various particular features being co-instantiated, but this unity is represented not discursively but rather intuitively. However the details of this kind of representation are described, it is non-conceptual insofar as its *representational content* is not conceptual or discursive, but thoroughly intuitive. But this does not mean that one could entertain such a representation without both *having* and making *use* of concepts (albeit not by having their content included in the intuition), since it results from a synthesis that proceeds “in accordance with the categories” (B152). Specifically, the categories provide the rules according to which the manifold is synthesized in intuition.⁹¹ Thus, though its representational content is not conceptual (it does not represent the object *as F* and *G*), the intuition cannot exist without concepts being involved in the synthesis that produces it. So in this specific sense, this kind of representation could be viewed as “conceptual” rather than “non-conceptual.” If these two senses in which intuitions might be called conceptual are not distinguished, there is the obvious danger that participants in the debate might talk past each other.

5. Reason, Science, Metaphysics, and the Limits of Cognition

In addition to sensibility and understanding, Kant posits a faculty of reason. Though he characterizes that faculty in various ways, his most fundamental and distinctive description is of a spontaneous faculty that seeks conditions

for whatever is conditioned, in fact, that seeks the totality of such conditions, which is itself therefore unconditioned.⁹² For only when reason has found the unconditioned condition of what is conditioned will it have satisfied its essential “desires” or “needs” and thus discovered an appropriate “resting place” (A584/B612). Kant distinguishes two uses of reason, the logical and the real. While the former consists in drawing inferences in syllogisms and plays a role in establishing scientific knowledge, the latter attempts to establish synthetic a priori cognition of the objects of traditional metaphysics. The account of cognition presented above puts us in a position to clarify reason’s logical use in syllogisms and science (5.1), and to determine its real use in metaphysics (5.2), especially insofar as it relates to Kant’s argument for his claim that we cannot have cognition of things in themselves.

5.1. Syllogisms and Science

What is distinctive about Kant’s account of the logical use of reason in syllogisms is that he thinks of the conclusion of a syllogism as a conditioned cognition that follows from its major and minor premises, where the major expresses a certain kind of conditioning relation (categorical, hypothetical, or disjunctive) and the minor is subsumed under the major (see A303–5/B359–61; *Jäsche*, 9:120–36). The logical account of concepts supports his doctrine

of syllogisms insofar as the subsumptions required for syllogisms are based on the containment relations that obtain between concepts.⁹³ Further, insofar as the major and minor premises of a syllogism are not themselves unconditioned, reason seeks higher cognitions from which they would in turn follow. In this way, reason seeks a chain of syllogisms that ascend from more specific cognitions to more general cognitions, leading up to highest, unconditioned cognitions, which would serve as the first principles of science.

In the *Metaphysical Foundations of Natural Science*, Kant defines science proper as cognitions that are systematically ordered according to rational principles and established with apodictic certainty, i.e. with “consciousness of their necessity” (*MAN*, 4:468). Given the stringency of these requirements, Kant denies that chemistry, psychology, history, and anthropology are sciences proper. More interestingly, in the Appendix to the Transcendental Dialectic Kant argues that several regulative principles are “indispensably necessary” for attaining cognition that would be systematically related so as to qualify as science (A644/B672). Specifically, the principles of homogeneity, specification, and continuity (A658/B686) are needed to bring about the systematic unity required for science by directing the understanding (in its search for a complete taxonomy of kinds) always to seek *higher* and *lower* concepts as well as a third concept *in between* any two concepts. In this way, one can achieve “the greatest unity [of cognition] along side the greatest extension” (A644/B672).

5.2. *Metaphysics and the Limits of Cognition*

The real use of reason, by contrast, concerns principles that pertain to objects directly rather than to cognitions about them. Thus, if in its logical use reason seeks unconditioned *cognitions* as the ultimate premises for a chain of syllogisms, in its real use it seeks unconditioned *objects* that condition the different objects we experience (see A305–9/B362–66). For example, for any body that occupies space, reason will seek the parts that compose it, and then the parts of those parts, etc., until it reaches, e.g. simples, which, since indivisible, have no further parts that could condition them. This kind of real use of reason leads to the formation of ideas that represent the objects of traditional metaphysics, namely God, the world as a totality (e.g. a totality of simple substances), and the soul, since reason arrives at these ideas by thinking the totality of conditions for the different (conditioned) objects we experience (see A321–38/B377–96). The real use of reason is thus crucial to the project of the first *Critique*, which investigates the possibility of synthetic a priori cognition of the unconditioned objects of traditional metaphysics.

Kant's strategy for determining whether we can have cognition of the objects of traditional metaphysics would seem to derive, at least in part, from his reflections on the closely related question of whether we can have

cognition of things in themselves. Kant's position is that we cannot have such cognition, but consensus on the exact nature of Kant's arguments for this position has proved elusive.⁹⁴ The account of cognition described above may allow for some progress by helping us to focus on the givenness condition on cognition⁹⁵ and ask: Why can things in themselves not be given to us through sensibility? Kant appears to hold that things in themselves can affect us, yet what is thereby given is not a thing in itself, but rather an appearance. Why must we represent the objects that affect us as appearances rather than as they are in themselves?

Insofar as objects given through sensibility are represented by intuitions, what makes them represent appearances must be due to either the matter or the form of intuition (or both), and a case can be made for each. First, because Kant identifies the matter of an empirical intuition as sensation and sensations are defined as representations that reflect only the way in which objects affect the subject rather than the objects themselves, the intuition into which sensations are taken up can represent only how these objects appear to us and not as they are in themselves.⁹⁶ Second, because the form of intuition is, for Kant, a merely subjective principle in us that organizes and determines whatever sensible manifold is given, any intuition based on such a form cannot reflect features of things in themselves, but rather must represent appearances.⁹⁷ A variant on this second option would be that since our particular forms of intuition are space and time and since things in themselves are not spatio-temporal, our spatio-

temporal intuitions cannot be of things in themselves. Though these arguments are not unproblematic, they are based on fundamental aspects of Kant's account of cognition. Moreover, since the arguments are not exclusive, Kant may have relied on both.

Kant's account of cognition sheds light on two further aspects of his denial of cognition of things in themselves. First, Kant's claim can seem more plausible because cognition (rather than, say, knowledge) is a cognitive state that requires not only reference, but also a representational content that is based on the object's being given. Thus, Kant's claim is simply (but still controversially) that we cannot have the special kind of cognitive access to things in themselves required for cognition, since they are not given to us. Even if it was granted that I have a clear concept of the soul, I can neither (demonstrably) refer to it nor represent it as having general features (not already analytically contained in its concept) because no soul could be given to me, and I thus cannot have the kind of cognition required to determine its mortality or immortality.⁹⁸

Second, Kant's claim that we cannot have cognition of things in themselves does not *immediately* entail that we cannot have knowledge of things in themselves. In fact, it has been noted that we do (and in fact must) have some limited knowledge of things in themselves.⁹⁹ For Kant clearly claims to know that things in themselves exist, that they are neither spatial nor temporal, and that they affect us, and one might even think that we can know that the truths of logic (or analytic truths) would have to apply to them.

Insofar as knowledge rather than cognition is at issue, it would be necessary to carefully delineate the kind of knowledge that Kant denies that we can have so that it includes, say, only *synthetic* knowledge of *particular* objects. Understanding Kant's claim about knowledge in this way makes it natural to think that his argument for it could derive from our inability to have cognition of things in themselves. For if knowledge requires an objectively sufficient justification and if cognitions were required for any objectively sufficient justification of particular things, then knowledge of particular things in themselves would require cognition of particular things in themselves.

Conclusion

By describing the basic elements and structure of Kant's notion of theoretical cognition, we hope to have made the fundamental argument of the first *Critique* clearer. Insofar as cognitions are specific mental states requiring that our concepts and judgments determine objects given in sensible intuition, one can see what it is that prevents them from being empty thoughts or "mere figments of the brain" (*blosse Hirngespinnste*). For us to have cognition, an object must be given in sensible intuition in such a way that it is present to mind, and our concepts must have a suitable content that can apply to it and render it intelligible to us. From Kant's perspective, it is a virtue of his general account of cognition that it is consistent with the

synthetic a priori status of both mathematics and the pure part of natural science. For this allows him to consider whether the claims of traditional metaphysics, which are similarly synthetic and a priori, satisfy the specific conditions on cognition that he has articulated. What the first *Critique* shows is that, insofar as they are to be based exclusively on theoretical grounds, the claims of metaphysics fall short. This conclusion is, however, consistent with Kant's central claim in the *Critique of Practical Reason*, namely that practical considerations can bestow objective reality on ideas in such a way that we can extend our cognition to the objects of traditional metaphysics, even if only in a practical respect.¹⁰⁰

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¹ Both authors contributed equally to this paper. The authors started out with different understandings of Kant's notion of cognition (e.g. regarding the conceptual or non-conceptual nature of intuition). While important differences remain, one aim in writing the present paper was to develop a framework for locating and discussing these differences in a fruitful way.

² Kant distinguishes between theoretical and practical cognition. The former includes several particular kinds of cognition—e.g. scientific, rational, mathematical, a priori, and historical. In the following, we focus, albeit not exclusively, on Kant's notion of theoretical cognition in the *Critique of Pure Reason*. References to the *Critique of Pure Reason* use the standard A/B pagination. For other works, we give a short title along with the volume and page number of the Academy Edition. All translations are our own, though we have consulted and sometimes followed the translations published by Cambridge University Press.

³ In other passages, Kant specifies this by asserting that cognition is a conscious representation that consciously relates to an object (cf. 9:91, 24:752).

⁴ The *Jäsche Logik* has a somewhat uncertain status, because Jäsche was heavily involved in the production of the book.

⁵ See also B146, A51/B76–77, and 24:752.

⁶ Cf. A19/B33, A320/B377.

⁷ Unfortunately, Kant does not elaborate on the notion of intelligibility relevant to the thought condition. In the human case, thinking an object by means of concepts or constructing a syllogism involving the object renders it intelligible by placing it in a classificatory structure of general features. (See section 3 below.) How it is satisfied in the divine case is less clear, though intellectual

intuition clearly requires some kind of intelligibility (or “intellection”).

⁸ Cf. A15/B29, A50/B74.

⁹ By regarding this distinction as one in kind, rather than degree, Kant contrasts his view with that of his predecessors, Locke and Leibniz (A271/B327).

¹⁰ Kant adds that merely indicating “what the intuition of the object **is not**, without being able to say what is then contained in it” is insufficient for cognition in this sense (B149).

¹¹ In addition to ‘*Erkenntnis*’ and ‘*erkennen*,’ Kant uses terms such as ‘*Kenntnis*’ and ‘*bekannt*,’ which have somewhat different connotations.

¹² In his influential English translation of the first *Critique* Norman Kemp Smith rendered ‘cognition’ as ‘knowledge,’ following the lead of many translations of the Latin term ‘*cognitio*.’

¹³ See Chignell, “Kant’s Concepts of Justification” and Pasternack, “Kant on Knowledge, Opinion, and the Threshold for Assent.”

¹⁴ Kant allows that the kind of certainty required for knowledge can rest on indirect proof, e.g. by *reductio ad absurdum* (cf. 9:71).

¹⁵ For fuller discussion of the relations between cognition and knowledge, see Watkins and Willaschek, “Kant on Cognition and Knowledge.”

¹⁶ Note that this way of speaking does not prejudge the issue, to be addressed in section 4.2, whether intuitions represent, and refer to, objects independently from concepts.

¹⁷ For illuminating discussion of Kant’s notion of the intuitive intellect, see Förster, *The Twenty-Five Years of Philosophy*.

¹⁸ Kant’s narrow sense of cognition is thus not restricted from the outset to a combination of sensible intuition and discursive concepts, but rather is defined more abstractly in terms of givenness and thought in a way that ought to be

acceptable even to rationalists, such as Leibniz or Wolff.

¹⁹ Kant's account of cognition in general does not, however, presuppose Transcendental Idealism and can be stated largely independently of it.

²⁰ Kant speaks of both objects and representations as given. We discuss the latter case in section 3.1. Moreover, Kant sometimes uses the term 'given' to refer to the mere existence of objects (e.g. A498/B526). Note also that Kant distinguishes between the immediate givenness of an object in intuition and a derivative, mediate kind of givenness (A156/B195). We restrict our discussion here to the former, fundamental case. On the relevant notion of immediacy, cf. section 2.4 below.

²¹ Cf. A223/B271 where Kant says that we can "give" an object corresponding to the concept of a triangle by constructing it. So construction does entail givenness. However, since mathematical objects do not exist in the same sense in which empirical objects do, one might be tempted to infer, against our view, that givenness does not entail existence. We want to resist this temptation by attributing to Kant the following position. Since what is given in the construction of a mathematical object in pure intuition is only the form of the object and not either its matter or its qualities (see B147, A714/B742, and A719/B747), and since the (empirical) existence of an object pertains to its matter, it stands to reason that the (empirical) existence of the object is not given with the construction of a mathematical object. But, first, this is consistent with saying that the existence of the object's formal properties is given in construction in a priori intuition (where "existence" is not to be understood along the lines of the postulates of empirical thinking, but in a sense appropriate to "formal" objects). One could thus say that in the special case of mathematics Kant's notion of givenness is somewhat attenuated in this

respect. Yet, second, Kant repeatedly adds a further qualification to the mathematical case. To count as mathematical cognition, not only must a mathematical concept have an a priori intuition in which (the form of) its object is constructed, but that a priori intuition must also be applied to empirical intuition (B147). That is, even if (empirical) existence cannot be constructed in a priori intuition (which Kant asserts, e.g. at A179/B221–22), for mathematical cognition to be cognition he requires that mathematical concepts nonetheless be related to the existence of objects by having the requisite a priori intuition be applied to empirical intuition. In this way, he preserves the content of his notion of cognition as much as possible, while recognizing the important differences that obtain in the case of mathematics.

²² Kant does seem to allow for intuitions of the imagination, where the object does not exist (e.g. 7:167). We take “intuition” in these passages to stand for intuitive representation, not for intuitions proper. (For the distinction between intuitions and intuitive representations, see section 2.6 below).

²³ The claim that givenness is a condition for cognition needs to be qualified for cognition of past objects and universal cognition. For the former, it may be sufficient that the object has been given at some time. For the latter, it may suffice that each object could, in principle, be given.

²⁴ This raises the question of whether sensible objects could be given to God, despite Kant’s explicit denial that God could have sensible cognition (28:1051).

²⁵ Cf. *Inaugural Dissertation*: “the sensation which constitutes the *matter* of a sensible representation is, indeed, evidence for [*arguit*] the presence of something sensible” (*Inaugural Dissertation*, 2:393).

²⁶ A causal reading of sensibility might be preserved if one viewed the representation of mathematical objects as an effect of *internal* causes, with the

mind acting on its own sensibility (via self-affection), as Kant seems to suggest in various passages (e.g. B154). However, given that affection generates sensations, one would have to explain why such cognition would not be empirical.

²⁷ See also the remarks about the difference between logical and aesthetic distinctness (*Deutlichkeit*) in the *Jäsche Logik* (9:62).

²⁸ Kant explicitly distinguishes between discursive (or logical) clarity, which occurs through concepts, and intuitive (or aesthetic) clarity, which derives from examples or illustrations and involves intuitions (Axvii-xviii; also cf. *Blomberg Logik* 24:130 and *Jäsche*, 9:35). For an illuminating account of the distinction between intuitive and discursive clarity, see Grüne, *Blinde Anschauung*, ch. 1.3.

²⁹ Empirical concepts must have empirical content and only sensations could give rise to the empirical element of that content.

³⁰ See Jankowiak, "Sensations as Representations in Kant." Sellars ascribes an analogical content to sensations in *Science and Metaphysics*.

³¹ Cf. Sellars, *Science and Metaphysics*, 9.

³² This definition of intuition is completely generic and also obtains for intellectual intuition.

³³ We discuss the representational content of intuitions further in section 4.2.

³⁴ By saying that concepts are *essentially* types and intuitions *essentially* tokens, we allow for the obvious fact that concept-applications on particular occasions are tokens, while intuitions, too, fall under types. However, while the contribution of a concept-token to a judgment such as "This is a ball" is fully determined by the concept-type involved (here *ball*), the intuition is related to an individual object (this ball) in a way that does not derive from its instantiating the corresponding type (intuition of a ball). In addition to these

two senses of singularity, an intuition might be singular in referring to *individuals*.

³⁵ That empirical intuitions involve sensations does not violate the immediacy condition because sensations do not directly represent objects.

³⁶ See Parsons, *Mathematics in Philosophy: Selected Essays*.

³⁷ See Howell, "Intuition, Synthesis, and Individuation in the *Critique of Pure Reason*," and Brandt, "Transzendente Aesthetik." A further possibility is that intuitions refer via singular or intuitive rather than general marks, where singular marks are consistent with the immediacy of reference (Smit, "Kant on Marks"). The textual support for singular marks is thin, and one might also allow for singular marks, but deny that reference is established through them. See section 3.2 below for discussion.

³⁸ Note that talk of "spatio-temporal location" glosses over the fact that external objects, according to Kant, are temporal only indirectly (by being the objects of inner sense). We abstract from this point in what follows.

³⁹ Kant also mentions an a priori manifold for a priori intuition (see B150, B161).

⁴⁰ Kant uses the term '*anschaulich*' (a cognate of *Anschauung*, which is translated as intuition) as well as the corresponding Latin term '*intuitiv*' (which is translated as intuitive). Further, he uses the intuitive-discursive contrast in several ways and applies it to a variety of items: modes of representation (*Vorstellungsart*; cf. *Critique of the Power of Judgment*, 5:351; *Anthropology from a Pragmatic Point of View*, 7:244), kinds of cognition (*Jäsche*, 9:33; *Anthropology from a Pragmatic Point of View*, 7:191), understanding (*Critique of the Power of Judgment*, 5:407), distinctness (Axvii) and certainty (A162/B201) as well as judgments (*Prolegomena to Any Future Metaphysics*, 4:281) and principles (A733/B761).

⁴¹ Cf. e.g. *Critique of the Power of Judgment*, 5:409, Jäsche, 9:58).

⁴² Given that judgments and principles are essentially general, the sense in which they are intuitive must be derivative in some way, e.g. by depending on intuitive representations.

⁴³ Cf. B40; *On a Discovery Whereby any new Critique of Pure Reason is to be made Superfluous by an Older One*, 8:210.

⁴⁴ But not in all cases, since in calling “intuitive” judgments and principles intuitive Kant is sometimes saying that their epistemic justification depends on construction in pure intuition.

⁴⁵ Allais, “Kant’s One World,” 59n., points to this passage to distinguish between intuitions and intuitive representations, but without placing that distinction in the wider context of Kant’s intuitive/discursive distinction.

⁴⁶ Against this, Stephenson, “Kant on the Object-Dependence of Intuition and Hallucination,” points out that Kant’s account of hallucinations differs from his account of veridical intuitions only in that the causal relation that makes the latter veridical is missing in the former. But this is not inconsistent with the point that Kant thought of intuitions as object-involving representations; it only explains why, according to Kant, hallucinations can be subjectively indistinguishable from intuitions.

⁴⁷ Kant uses the term ‘understanding’ both in a wider sense for the faculty of discursive thought (which includes reason in the narrow sense as the faculty of syllogisms) and in a narrower sense for the faculty of concepts. In this section, we are primarily concerned with the latter. Kant uses the term ‘judgment’ to refer either to the act of combination or to the product combined. In the latter sense, a judgment is both the combination of various representations and itself a representation (see Jäsche, 9:101); in considering judgments as representations, Kant follows Meier *Auszug aus der Vernunftlehre*, §292.

Something similar is true of inferences, which Kant considers complex judgments (see A307/B364; 24:280).

⁴⁸ Note that Kant sometimes uses the term 'thinking' (*denken*) in a different sense to contrast with 'cognizing' (*erkennen*) (Bxxvi).

⁴⁹ For a reading that closely links spontaneity to activity and receptivity to passivity, see Engstrom, "Understanding and Sensibility." Grüne suggests that the spontaneity of the understanding consists in actualizing an innate capacity for producing representations (*Blinde Anschauung*, 168).

⁵⁰ For a characterization of spontaneity in terms of (relative) independence from input, see Sellars, "...this I or He or It (the thing) which thinks..." and Kitcher, *Kant's Transcendental Psychology*.

⁵¹ According to McDowell, *Mind and World*, the dualism of "conceptual scheme" and "the Given" is a response to a reading of spontaneity according to which the workings of the latter, if unconstrained by sensibility, are arbitrary by not being answerable to an objective reality.

⁵² See *Jäsche*, 9:58 and 9:91. While some take 'discursive' to mean conceptual, (e.g. Longuenesse, *Kant and the Capacity to Judge*, 6), others identify it with the understanding's dependence on objects being "given" to it for cognition. (See Pippin, *Kant's Theory of Form*, 28, and Allison, *Kant's Transcendental Idealism*, 12-13.)

⁵³ See section 3.2 below.

⁵⁴ See A19/B33, A68/B93, A320/B377, and *Jäsche*, 9:91.

⁵⁵ This distinction corresponds roughly to the two meanings of 'concept' that Longuenesse identifies, *Kant and the Capacity to Judge*, 47.

⁵⁶ Although Kant never explains his account of marks in his published writings (besides the *Jäsche Logik*), they rely on it heavily (see 2:47-61; A727/B755;

4:484; 6:227). The claim that all concepts contain marks is problematic if, as Kant thinks, there is a highest concept.

⁵⁷ Occasionally, Kant seems to acknowledge “intuitive” marks (15:299–300, 24:725; cf. Stuhlmann-Laeisz, *Kants Logik*, 73, 89; Smit, “Kant on Marks,” 254; Grüne, *Blinde Anschauung*, 68). This may not be compatible with Kant’s claim that marks are general (A320/B377; *Jäsche*, 9:58).

⁵⁸ A mark *M* can serve as a ground of cognition (*ratio cognoscendi*) with respect to some object to which *M* applies insofar as *some other* cognition of that object can be gained on the basis of *M*. For instance, we may (defeasibly) infer from a stain’s being red that it is a blood stain (24:753). See Stuhlmann-Laeisz, *Kants Logik*, 90, and Haag, *Erfahrung und Gegenstand*, 164, for similar accounts and Grüne, *Blinde Anschauung*, 58, and Prien, *Kants Logik der Begriffe*, 58, for contrasting readings.

⁵⁹ Kant speaks of both *concepts* (or representations) and *things* as being “contained under” a concept (*Jäsche*, 9:95–96). Here, we are interested primarily in containment-relations between concepts. Also, note that ‘containment in’ is not an entailment-relation, but a part-whole relation between representations and their parts. (Intuitions, too, contain their parts in them; cf. B40). ‘Containment under,’ by contrast, is a logical entailment-relation.

⁶⁰ Since the marks contained in a concept may vary from person to person (A727–28/B755–56), it is unclear whether Kant’s logical account of concepts can allow for concepts being public, presumably depending on whether there is sufficient overlap between the marks contained in the concepts that different people have.

⁶¹ On Kant's account of synthesis, see Hoppe, *Synthesis bei Kant*, and Grüne, *Blinde Anschauung*.

⁶² Cf. B135. Note that this sense of 'given' pertains to representations, not objects (see section 2.1 above).

⁶³ While Kant mainly speaks of this manifold as a "manifold of representations given *in* an intuition" (B135), he also mentions a "manifold of intuitions" (B154). For present purposes, we use 'manifold of intuition' to designate a manifold of sensible representations, which can be intuitions, sensations, or regions of space and time.

⁶⁴ Kant identifies a concept with the representation "under" which representations are united in an act of synthesis (A68/B93), but also with the rule that guides this act of synthesis (A106) and with the consciousness of that unity (A103). Despite these different formulations the fundamental picture remains the same.

⁶⁵ In his logic lectures Kant offers an account of the generality of concepts in terms of the three logical acts of *comparison*, *reflection*, and *abstraction*, "by which concepts are being produced concerning their form [i.e. their generality]" (*Jäsche*, 9:94). However, this account cannot explain the generality of concepts, since the comparison of objects with respect to their similarities and differences already presupposes general representations. Kant's *Reflexionen* suggest he is aware of this point; cf. Refl. 2854, 16:547; Refl. 2880, 16:557; Refl. 2883, 16:558. Most interpreters take this account to be limited to empirical concept formation. Others, most notably Longuenesse, *Kant and the Capacity to Judge*, think that this account holds for all concepts, as Kant claims (*Jäsche*, 9:94).

⁶⁶ See n. 33 above.

⁶⁷ See Grüne, *Blinde Anschauung*, 51–52, for a clear exposition of these options.

⁶⁸ Intuition is thus required not only for the givenness-condition, but also for the thought condition.

⁶⁹ Note that “objective reality” can be read in at least two ways, as involving either reference or *ostensible* reference (i.e. reference that can be established either empirically or by means of a transcendental deduction). Accordingly, Kant’s claim that concepts without objective reality are empty will mean either that they do not refer to objects at all or that we cannot establish whether they refer. On Kant’s use of ‘objective reality,’ see Zöller, *Theoretische Gegenstandsbeziehung bei Kant*.

⁷⁰ But how can one tell *whether* something given in intuition can be cognized by applying a concept? While one could note that the object exhibits the marks contained in the concept, the question obviously reappears with respect to the marks. Kant therefore insists that the application of concepts to objects cannot be based on general marks or criteria (see A133/B172). Since one cannot state explicitly (in discursive form) the rule that guides the application of concepts, Kant attributes it to the “blind” working of the imagination (A78/B103).

⁷¹ The question how concepts can have “objective reality” or “latch on” to the world is particularly pressing, according to Kant, in the case a priori concepts (A85/B117). For empirical concepts, Kant takes the general outline of an answer to be readily available (by recourse to experience). We take the psychological account of concepts to apply to both a priori and empirical concepts.

⁷² Despite its centrality to his views, we cannot discuss Kant’s complex account of the unity of apperception.

⁷³ In the following, we bracket well-known problematic cases of judgments such as “the round square is round.”

⁷⁴ Relatedly, by ‘determination,’ Kant often means a general feature of that object.

⁷⁵ As noted (note 9 above), Kant holds that genuine cognition must represent a positive feature of an object. This could mean that cognition requires a positive rather than a merely negative predicate. To explain the distinction between positive and negative predicates in detail would require consideration of Kant’s distinctions between negative and infinite judgment (A71–3/B97–8) and between logical and transcendental negation (A574–5/B602–3).

⁷⁶ For discussion of this issue, see Lee, “The Determinate-Indeterminate Distinction.”

⁷⁷ Kant’s distinction between sensibility and understanding thus aligns three distinctions that did not always go together in the history of philosophy: between sources of representations (senses vs. intellect), between representations of different scope (singular vs. general) and between kinds of representational content (intuitive vs. discursive).

⁷⁸ The immediate referential relation in the case of mathematics would be established by the object being constructed in pure intuition.

⁷⁹ For these classifications and inferential relations not to be a “mere play” of representations, however, concepts must also have “objective reality.”

⁸⁰ For instance, Kant’s general logic does not have the means to express the distinction drawn in transcendental logic between singular and universal judgments.

⁸¹ This model can be extended to include cognitions consisting in general (“some *A* are *B*”) and universal judgments (“all *A* are *B*”). For such judgments

to count as cognitions, (1) the concepts they contain must possess “objective reality” and (2) there must be possible corresponding singular cognitions (i.e. cognitions of particular *A*’s being *B*). One might suppose that judgments must also be *true* to qualify as cognitions, but Kant does not obviously accept that (see Watkins and Willaschek, “Kant on Cognition and Knowledge”).

⁸² Cognitions on the perception model are not judgmental in the sense of consisting only of concepts and a copula. They might, however, be judgmental in a wider sense of judgment as a complex of representations unified under a concept.

⁸³ Alternately, one could argue: since intuitions represent objects, and representing objects requires concepts, there cannot be intuitions without concepts.

⁸⁴ For a non-conceptualist reading, see e.g. Rohs, “Bezieht sich nach Kant die Anschauung unmittelbar auf Gegenstände?” and Allais, “Kant and Non-Conceptual Content”; for a conceptualist take, Allison, *Kant’s Transcendental Idealism*; for a mediating position and a helpful overview of the debate, see Grüne, *Blinde Anschauung*.

⁸⁵ On the relation between the conceptualism/non-conceptualism issue and the B-deduction, see Hanna, “Kant’s Non-Conceptualism,” and Grüne, “Is There a Gap?”.

⁸⁶ For a similar point, see Hanna, “Kant’s Theory of Judgment.”

⁸⁷ See McLear, “Two Kinds of Unity,” for a recent attempt at distinguishing different options and looking for a compromise position.

⁸⁸ For a similar distinction in this context, see Allais, “Kant and Non-Conceptual Content,” 405.

⁸⁹ These distinctions could then be aligned in different ways with Kant's own distinction between "appearances" as "indeterminate object[s] of an empirical intuition" (A20/B34) and "*phaenomena*" as "appearances, to the extent that as objects they are thought in accordance with the unity of the categories" (A248-49).

⁹⁰ It may also be helpful to distinguish between internalist and externalist senses of representing an object.

⁹¹ How the involvement of the categories affects the representational content of the intuition is a separate question.

⁹² If objects are *given* through sensible intuition and *thought* through the understanding's concepts, they are *comprehended* through reason's ideas of the unconditioned (which guide the formation of syllogisms).

⁹³ Basing syllogisms exclusively on containment-relations is problematic, since some syllogisms are valid solely in virtue of their form and not because of containment-relations.

⁹⁴ For different reconstructions of Kant's argument, see Strawson, *The Bounds of Sense*; Langton, *Kantian Humility*; Hogan, "How to Know Unknowable Things in Themselves"; and Chignell, "Real Repugnance." For critical discussion, see, e.g. Ameriks, *Interpreting Kant's Critiques*. How one reconstructs Kant's argument will also depend on how one understands the distinction between things in themselves and appearances. For different readings, cf. e.g. Prauss, *Kant und das Problem der Dinge an sich*; Allison, *Kant's Transcendental Idealism*; Guyer, *Kant and the Claims of Knowledge*; Allais, "Kant's One World"; Rosefeldt, "Dinge an sich und sekundäre Qualitäten."

⁹⁵ One might also focus on the thought condition and argue that since only concepts with objective reality can determine objects and since our concepts of

things in themselves fail to have objective reality, we cannot have cognition of things in themselves. Whether this is a distinct line of argument depends on how objective reality is understood and what argument there is for thinking that our concepts of things in themselves lack objective reality.

⁹⁶ See, for example, the passivity argument described by Ameriks, *Kant's Theory of Mind*.

⁹⁷ One controversial assumption implicit in this step is that the matter that is organized by the form cannot represent real features of things in themselves, but rather must be transformed by the form.

⁹⁸ Kant comes close to, but stops short of such claims in a difficult footnote at B422-3.

⁹⁹ This recognition was the basis for the first half of Jacobi's famous critical remark that without things in themselves one cannot enter Kant's "system" (but that with them one cannot remain in it). For useful discussions of the kinds of knowledge of things in themselves that Kant is and is not denying, see Ameriks, *Interpreting Kant's Critiques*.

¹⁰⁰ We are grateful to Karl Ameriks, Clinton Tolley, and audiences at the University of Frankfurt and the University of Chicago where earlier versions of this paper were presented, and to two anonymous readers for the *Journal of the History of Philosophy* for extremely helpful feedback.