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MINI-SYMPOSIUM ON KANT AND COGNITION

Kant on the place of cognition in the progression of our representations

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Abstract I argue for a new delimitation of what Kant means by 'cognition [Erkenntnis]', on the basis of the intermediate, transitional place that Kant gives to cognition in the 'progression [Stufenleiter]' of our representations and our consciousness of them. I show how cognition differs from mental acts lying earlier on this progression—such as sensing, intuiting, and perceiving—and also how cognition differs from acts lying later on this progression—such as explaining, having insight, and comprehending. I also argue that cognition should not be confused with 'knowledge [Wissen]', insofar as knowledge represents the culmination of a separate orthogonal progression of acts of 'holding-true'. Along the way, I show how having in focus the specific progression from representation, to consciousness, to cognition (and beyond) allows us to better appreciate the architectonic significance of the progression of Kant's analysis in the first Critique (and beyond), and also helps to illuminate the unity of Kant's account of cognition itself across its variety of (empirical, mathematical, philosophical) forms.

Keywords Kant · Cognition · Perception · Representation · Intentionality · Consciousness · Thought

Kant's works are cited according to the standard *Akademie Ausgabe* (Berlin: 1900–) volume and page number; except in the case of the first *Critique*, which is cited according to the standard A- and/or B-edition pagination. I have consulted and often followed the *Cambridge Edition* of Kant's works (Cambridge: 1991–), but I have modified the translations throughout.

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1 Introduction: cognition between representation and knowledge

My goal here is to use Kant's background *psychology* (or what we might now call his *philosophy of mind*) and, more specifically, his account of 'representation [Vorstellung]' and 'consciousness [Bewußtsein]', to provide a new and (hopefully) more precise delimitation of what Kant means by 'cognition [Erkenntnis]', as it is manifest in human minds. More specifically, I will argue that we should take our interpretive cue from the intermediate place that cognition is accorded in the developmental or genetic 'progression [Stufenleiter; literally: step-ladder]' that Kant takes to obtain within our representations, and our consciousness of them. This is the progression that begins with mere *representation*, moves through simple *consciousness* of representation and more complex '*acquaintance* [Kenntnis]' with them, then on to *cognition* as the consciousness of an object 'through' its representations—and continues beyond mere cognition and culminates in 'comprehending [begreifen]' the object (cf. 9:64–65, 24:730–1 and 752–3, 16:342–43, B376–77).

Seeing where cognition falls on this progression, and how its place is specified, will help to head off misunderstandings about cognition from three different directions. First, it will help to more sharply clarify the contrast that Kant means to draw between cognition and mental acts that he classifies as lying *earlier* on the progression. These acts include 'sensing [empfinden]', 'intuiting [anschauen]', 'perceiving [wahrnehmen]', and mere 'thinking [denken]'. All of these acts function as conditions for cognizing, but do not yet themselves meet the conditions for being cognizing per se—despite many of these often being run together with cognition (and with each other) by Kant's readers. Rather, they amount only to a form of mere representation, or at best mere consciousness of representation.

Second, familiarity with this genetic progression will also let us begin to more sharply differentiate cognition per se from still other mental acts which Kant places *later* than cognition on the progression. These acts include 'understanding [verstehen]', 'explaining [erklären]', 'having insight [einsehen]', and 'comprehending [begreifen]'. While these acts, too, have often been taken to be equivalent to cognizing (and to one another), we will see instead that they all involve additional mental activity beyond what is required of cognition per se, such that cognition is a necessary but not sufficient condition for such acts.

Finally, this approach will also allow us to see more precisely why cognition cannot be identified with what Kant means by '*knowledge* [Wissen]', i.e., the act of 'holding-true [Fürwahrhalten]' a judgment or proposition which is true, where this holding-true is done with sufficient 'grounds [Gründe]' (roughly: justified true belief). As I will show below, knowledge itself is not given a place anywhere on the progression to and from cognition, but rather is placed by Kant at the culmination of a *separate* and *orthogonal* progression. The progression to cognition does not include holding-true as one of its stages, nor does cognition itself include holding-true as one of its conditions.

In this last respect, my approach will contrast with the more familiar *epistemological* way of explaining the significance of cognition for Kant, which takes cognition itself to be a mental state or act closely akin to knowledge, and takes Kant's analysis of cognition and its limits in the first *Critique* and elsewhere to be, first and foremost, discussions of the conditions under which we are justified in holding certain claims to

be true.[1] I will argue, instead, that Kant's analysis of cognition consistently places it at a much more psychologically elementary level in our mental lives, characterizing it as a distinctive form of consciousness of a real object by way of a specific kind of combination of representations. For cognition to obtain, only this specific form of consciousness of an object must obtain; nothing about the object (or anything else) needs to be claimed (held-true) at all—which also means questions of justification for such attitudes do not (yet) arise.

Yet if the genetic account I develop here is meant to correct traditional epistemological approaches (as building too much into the conditions for cognition), it also differs from existing psychology-oriented accounts of cognition in key respects.[2] For one thing, it places a sharper emphasis on the overarching progression Kant takes to obtain within our representations and consciousness, and demonstrates the interpretive guidance that can be drawn from this, by taking seriously the specificity of the step or stage that Kant assigns to cognition within this progression. It also aims to give a more unified account of the difference between cognition per se and the mental acts or states that come before and after cognition on the progression. In particular, it places more emphasis, first, on an important shift Kant consistently makes when moving from mere consciousness to cognition—namely, a shift concerning which objects are being intended by the mind in the two cases. I will argue below that, for Kant, while consciousness is first and foremost a representation of a *representation*, cognition is a representation of a *further object* 'through' a representation. Second, my account more sharply foregrounds the importance of the role of consciousness of *sensation* as an 'effect [Wirkung]' as an enabling condition for cognition of the object causing the sensation, 'through' the consciousness of its representation.

In the latter respect, my account also differs, finally, from other more recent accounts that also mean to highlight the existence of a distinction between cognition and knowledge.[3] I argue that it is Kant's genetic-psychological account of representationality and consciousness in particular, rather than his broader accounts of modality or semantics, which provides us with the most appropriate pre- or non-epistemic context for understanding Kant's conception of cognition itself.[4]

Getting clearer on what Kant does and does not mean by human 'cognition' is crucial for our understanding of the various sorts of projects Kant means to be pursuing at various places throughout his writings on theoretical philosophy. Though the overarching question Kant identifies for theoretical (speculative) philosophy as whole is surely an epistemological one: 'what can I *know* [wissen]?' (B833), and though,

[1] Compare Strawson (1966) and Guyer (1987).

[2] Compare Kitcher (1990), Waxman (1991), and Brook (1994).

[3] Compare George (1981), Smit (2000), Makkreel (2003), Kain (2010a), Chignell (2014), Schafer (forthcoming), Watkins and Willaschek (2017); even earlier attempts to pull 'Erkenntis' apart from knowing can be found in Moore (1903, p. 83) and Bolzano (1837: §38).

[4] There has also long been a worry that Kant simply does not use 'cognition' in anything like a univocal sense (cf. Kemp Smith 1918, p. 79; Hanna 2001: 18n13, pp. 202–203; Chignell 2014: §C; Watkins and Willaschek 2017). As I hope will emerge in what follows, Kant seems to be working with a surprisingly unified conception of cognition and carefully and systematically distinguishes cognition from other mental phenomena (including its constituents).

as a whole, the first *Critique* itself famously has the result of rejecting the 'extravagant insights [Einsichten]' of previous metaphysics, and thereby 'negating knowledge [Wissen aufheben] in order to make room for belief [Glaube]' (Bxxx), it is actually only at the conclusion of the *Critique*, after the completion of what Kant calls the 'Doctrine of the Elements', that Kant finally turns to the direct analysis of knowledge itself (cf. B848f). The 'Doctrine of the Elements' itself—which comprises by far the greatest part of the *Critique*—consists instead of an analysis, first, of the conditions under which it is possible for us to have *cognition*, by looking to the two 'stems' ('sensibility [Sinnlichkeit]', 'understanding [Verstand]') from which all of our cognition emerges (cf. B29), before turning to the question of what 'reason [Vernunft]' can '*comprehend*' on the basis of such cognition (cf. B367). Crucially, then, Kant's analysis across the bulk of the *Critique* is not directly framed in terms of an account of the conditions for '*knowledge* [Wissen]' in particular.[5] And Kant's expository order itself suggests that cognition itself is something more fundamental than knowledge, something in terms of which knowledge is to be explained, but something whose own explanation will require an even more elementary point of departure.[6]

I will proceed as follows. In Sect. 2 I will introduce the core genetic progression Kant uses to elucidate what he means by 'cognition', focusing especially on the stages (of mere representation, and consciousness of representation) which precede cognition itself, in order to begin to uncover the conditions for cognition. In Sect. 3 I will then show how this genetic progression (representation, consciousness, cognition) underwrites Kant's account of how the (temporally) first form of cognition—namely, the form of '*empirical*' cognition that Kant calls 'experience [Erfahrung]'—arises in our minds on the basis of sensation and intuition as empirical representation, as well as perception as empirical consciousness. In Sect. 4 I will draw out thinking and consciousness of sensation as two acts that Kant specifies as necessary constituents of empirical cognition, while also further clarifying why neither alone count as cognition themselves. In Sect. 5 I will then turn to the question of whether these conditions extend to Kant's account of non-empirical cognition, by looking at his account of the *pure* 'rational cognition [Vernunfterkenntnis]' achieved in pure mathematics, in some conceptual analysis, and in philosophy (cf. B741, B14–18; 4:267–74). I will conclude in Sect. 6 by returning to the question of what consequences this genetic-psychological account of cognition has for Kant's account of knowledge, and for our understanding of the overarching goal of the *Critique* itself.

Before starting, a few notes on the restricted scope and ambition of what follows: though Kant thinks that other minds besides humans (e.g., the divine mind) would be

[5] Kant's disproportionate attention to *Erkenntnis* over *Wissen* had been obscured by Norman Kemp-Smith's 1929 English translation, which (as in his previous Kemp Smith 1918) uses 'knowledge' (and 'know') to render *both* 'Erkenntnis' (and its cognates) *as well as* 'Wissen'. Interestingly, John Richardson's 1819 translation of Jäsche's 1800 edition of Kant's *Logic* often opts for 'cognition' (though not uniformly), a practice thankfully followed (though unfortunately, also not uniformly) by the more recent, now-standard Cambridge translations of Kant's works.

[6] Compare Reinhold's claim (already in the late 1780s) that Kant's critical analysis of human cognition must be preceded by a more general and more 'elementary' theory of representation and its relation to consciousness (cf. Ameriks 2000: Part II).

capable of representing,[7] cognizing, and knowing, our focus throughout will be on his account of our own *human* minds. And though Kant thinks that our minds also have a practical 'use' (in bringing about the good), our focus throughout will be only on his account of the *theoretical* use of our minds.[8] Finally, though I will make use of a variety of Kant's 'Critical' writings, for constraints of space I cannot hope to consider every relevant passage bearing on these issues, or every alternate interpretation of those passages I do discuss. My aim here, therefore, is the modest one of presenting the basics of a textually grounded, conceptually coherent, systematically sensitive interpretation of Kant's use of 'cognition' and related terms, so as to begin to carve out a fresh perspective from which to approach Kant's psychology, epistemology, and his theoretical philosophy more generally.[9]

2 Representation, consciousness, cognition, comprehension

Kant's first extended discussion in the first *Critique* of the nature of cognition occurs just after the Aesthetic's analysis of the structure of sensibility, and just prior to the Analytic's investigation of the structure of understanding, and runs as follows:

> Our cognition [Erkenntnis] arises from two fundamental sources in the mind, the first of which is to *receive representations* (the receptivity of impressions), the second the capacity for *cognizing* [erkennen] *an object* by means of [durch] these representations (spontaneity of concepts) [my ital.]; through the former an object is *given* to us, through the latter it is *thought* in relation to that representation (as a mere determination of the mind). […] If we will call the *receptivity* of our mind the capacity to receive representations insofar as it is affected in some way *sensibility*, then on the contrary the capacity for bringing forth representations itself, or the *spontaneity* of cognition, is the *understanding*. (B74)

Here three main points stand out. First, though Kant initially characterizes cognition by means of two 'fundamental sources' from which it 'arises' (sensibility and understanding), he ultimately associates the act of 'cognizing' itself more strongly with one of them, as it is understanding and not sensibility which is called 'the capacity for *cognizing* an object' and 'the spontaneity of *cognition*'. This is confirmed shortly thereafter, when Kant characterizes our understanding simply as '*the* capacity for cognitions' (B137; my ital.), something he doesn't (to my knowledge) ever do with respect to sensibility in the *Critique*. This makes good sense of why cognition itself comes into clear focus as a topic in its own right only after the Aesthetic's analysis of

[7] In fact, Kant thinks that at least animals, and possibly even plants, are capable of representing; cf. 7:135, 9:65, 24:702. Compare Naragon (1990), McLear (2011) and Tolley (2016a).

[8] Hence I will not take up the important though difficult topic of distinctively *practical* representation (e.g., inclination), cognition, and knowledge. For discussion, see especially Kain (2010a), cf. Schapiro (2009), Chignell (2007), Engstrom (2009), Pasternak (2011).

[9] For a further development of an interpretation of Kant's cognitive psychology along these lines which tries to show its consequences for our understanding Kant's account of appearances and his idealism, see Tolley (forthcoming-a) and cf. Tolley (2013).

sensibility and its representations, and just prior to the Analytic's investigation of the understanding.

Secondly, Kant here signals a distinction that will become very important in what follows, between the '*representation* [Vorstellung]' acquired ('received') by sensibility, and the '*object* [Gegenstand]' cognized by the understanding 'through [durch]' this representation. The representation in question here is what Kant on the same page identifies as '*intuition* [Anschauung]' (B74). Earlier in the Aesthetic, Kant had described sensible representations in general as coming about due to the 'way in which we are *affected* [afficirt] by objects' (B33). The first 'effect [Wirkung] of an object on the capacity for representation' is what Kant calls '*sensation* [Empfindung]' (B34), which have things like colors, tastes, and sounds as their contents (B44). To yield an empirical intuition from such sensations, their contents are then 'ordered' together within a 'form' (either space or time), to form an 'appearance [Erscheinung]' as *its* content (B34). In the present passage, then, Kant means to distinguish the object of cognition from both of these representations (sensation, intuition), as the object is cognized 'by way of' these representations, on account of the 'relation [Verhältniß]' they bear to the object, due to their sensory contents having come to mind by the object's affection.

Third, and relatedly, Kant here associates the act of cognizing itself, not with mere intuiting, but with the further act of '*thinking* [denken]' about these affecting objects on the basis of intuition—i.e., with 'the act [Handlung] of relating [beziehen] a given intuition to an object' (B304), as he puts it later in the *Critique*. This association further helps to bring out the specific nature of the representational mediation that Kant thinks is involved in cognition, and its contrast with what transpires in intuition. Thinking, for Kant, is the act of representing objects 'through *concepts* [Begriffe]' (B93–94). Concepts relate to objects by first representing a 'mark or property [Merkmal]' that the object (and possibly others) might bear, rather than immediately representing individual objects directly. In this respect, concepts are also 'general' representations (cf. B377). Strikingly, Kant claims that the sole 'use' that our understanding can make of concepts is to form '*judgments* [Urteile]' (B93). (In fact, in the *Prolegomena* Kant nearly identifies thinking and judging: 'to think is just as much to judge, or to relate representations to judgments in general' (4:304).) In the cases in which judgments (thinking) amount to cognitions, Kant claims here that they involve a concept which serves as a 'predicate' to 'comprehend [begreifen]' some other 'representation' of an object (intuition or concept) which serves as the subject-term, as a representation whose object bears the relevant property (B93).[10] Such judgments are therefore the '*mediate* [mittelbar] cognition of an object, hence the representation *of a representation* of an object' (B93; my ital.).[11]

[10] Note here that what is being 'comprehended' is a representation, rather than the object represented.

[11] Kant takes this to imply that, as used by *our* 'discursive' understanding in human cognition, concepts themselves are representations that '*never* relate to an *object* immediately, but *only* to some other *representation* of it' (B93; my ital.). The contrasting 'immediate' *cognition* would only be possible for an *understanding* that would *itself* be 'intuitive' and so not dependent upon a separate capacity (sensibility) for immediate *representations* of objects, but generative of its *objects* directly in its acts (cf. B145; B72). Our own *intuitions*, while immediate, do not suffice for cognition (cf. Sects. 4.1 and 5 below).

From the foregoing, it might seem that human ('discursive') cognition is essentially a two-step process: first we are *given* representations (intuitions) via our sensibility, and then we *cognize* the objects of these intuitions by using our understanding to *think* about the objects, by 'comprehending' their intuitions under concepts in judgments. This picture, however, over-simplifies matters in several important respects. First, it says nothing about the fact that cognition itself can be developed beyond individual judgments about objects. This happens by the use of our '*reason* [Vernunft]' to link judgments together in '*inferences* [Schlüsse]' (B360), and ultimately to form a 'system' or '*science* [Wissenschaft]' which 'comprehends' a domain of objects under the 'idea' of the 'totality' of them (B860).

In fact, it is only this extended three-step process that Kant thinks charts the course from the beginning of cognition to its completion or perfection. Kant charts this three-step process both in terms of our capacities: 'all our cognition starts from *the senses*, goes from there to the *understanding*, and ends with *reason*' (B355; my ital.)—but also in terms of their distinctive representations: 'all human cognition begins with *intuitions*, goes from there to *concepts*, and ends with *ideas*' (B730; my ital.). Significantly, it is also this three-step process that provides the overarching frame for Kant's 'Doctrine of Elements' in the *Critique* itself, which moves from the science of 'the senses' and their intuitions (Aesthetic), to the science of the understanding and its concepts and judgments (Analytic), finally to the science of reason and its inferences in relation to ideas (Dialectic).

Yet even this three-step picture oversimplifies matters in several important respects. First, it fails to indicate that there are further intermediate steps between representation (intuition) and cognition. Most importantly, Kant thinks that, prior to cognizing the objects of our sensible representations, we must become '*conscious* [bewußt]' of these representations and of their contents in the first place. Our capacity for consciousness itself is what Kant calls '*apperception*' (cf. 4:542, B153). As Kant puts it in his *Anthropology*, it is only through becoming conscious of them that representations become 'clear [klar]' to us, rather than remaining 'obscure or dark [dunkel]' in us (7:135).[12]

Even consciousness of a representation 'in' me, however, is not yet sufficient to achieve cognition. A still further step must be taken: we have to 'bring' the representations of which we have become conscious 'to *concepts*', by representing a 'common ground' of their '*unity*' in our consciousness—i.e., representing the object that is common to them all— in a further act of representation via a 'function' that 'pertains to the *understanding*' (B103), which (as we have seen above) is identified as 'the capacity for cognition' (B137; cf. 7:138).

Finally, not only does Kant recognize a finer-grained staging *in between* representation (sensibility) and cognition (understanding), he also recognizes several distinct stages *beyond* cognition, associated with *reason*. Both of these points are evident from passages like the following, from Jäsche's edition of Kant's notes on logic, in which

[12] As will emerge below, this coming to consciousness itself requires still further mental activity beyond merely having a representation. This is performed by our 'imagination [Einbildungskraft]', which brings about the 'synthesis' of representations to allow for their 'apprehension', 'reproduction', and 'association' (cf. A99–102).

Kant points out a series of 'grades [Grade]' of 'objective content [Gehalt]' associated with our mental acts:[13]

[a] The first grade [Grad] of cognition is: to *represent* [vorstellen] something;
[b] The second: to represent something with consciousness, or to *perceive* [wahrnehmen] (*percipere*);
[c] The third: to *be acquainted with* something [etwas kennen] (*noscere*), or to represent something in comparison [Vergleichung] with other things, both as to sameness and as to difference;
[d] The fourth: to be acquainted with something with consciousness, i.e., to *cognize* [erkennen] it (*cognoscere*). Animals are acquainted with objects too, but they do not cognize them.
[e] The fifth: to *understand* [verstehen] something (*intelligere*), i.e., to cognize something through the understanding by means of concepts, or to *conceive* [concipiren]. One can conceive much, although one cannot comprehend [begreifen] it, e.g., a perpetuum mobile, whose impossibility is shown in mechanics.
[f] The sixth: to cognize something through reason, or to *have insight into* [einsehen] it (*perspicere*). With few things do we get this far, and our cognitions become fewer and fewer in number the more that we seek to perfect them as to content.
[g] The seventh, finally: to *comprehend* something (*comprehendere*), i.e., to cognize something through reason or a priori to the degree that is sufficient for our purpose. (9:64–65; cf. 24:730–1 and 16:342–43)

Jäsche's text identifies two further steps in between [a] mere representation and [d] cognition: [b] *perceiving*, understood as representation 'with consciousness [Bewußtsein]',[14] and [c] *acquaintance*, as representation with 'comparison'. Kant also goes on to explicitly name several mental acts that take us beyond cognition per se: [e] *understanding* or conceiving, [f] having *insight*, and [g] *comprehending*. The latter two in particular are assigned not to our capacity for understanding but to our reason[15].

In light of the terminological clues in these passages, this more fine-grained exposition of the seven stages of representations leading to and from cognition can be correlated with the four aforementioned capacities in the following manner:

(1) acts of *sensibility* provide the first 'level' of [a] mere *representation* without consciousness, by supplying *sensations* and *intuitions*;
(2) acts of *apperception* introduce [b] *consciousness*, and hence, *perception*, and also [c] acquaintance (comparison);
(3) acts of *understanding* introduce [d] *cognition* and [e] conceiving, by the use of *concepts* in thinking and judging;
(4) acts of *reason* are involved in [f] having insight and [g] *comprehension*, by unifying judgments under *ideas* (cf. Dialectic).

[13] I have added the lettering, here and throughout the remainder of the essay, for ease of cross-reference.

[14] In this period, the German 'wahrnehmen' has the sense of 'becoming-aware' (or more literally: 'taking up with awareness') of something—first and foremost, the taking up of a mental representation of something; for discussion of the pre-Kantian use of this term in this sense by Baumgarten and Tetens, see Tolley (forthcoming-b).

[15] In the corresponding *Reflexion*, 'understanding' seems to be assigned (along with 'cognizing') to the understanding; cf. 16:343.

This alignment helps to further clarify, first, why Kant begins his account of cognition per se only after the Aesthetic, at the outset of the Logic, i.e., the science of *understanding*.[16] It also makes clear that the account of cognition itself will be only one piece of the broader account Kant means to give in the *Critique* of what our *reason* is capable of having insight into and comprehending.

In the following section, I will turn our focus more directly to the Analytic's treatment of cognition itself, by spelling out what is involved in the transition from sensibility to understanding, and more specifically, the transitions from [a] mere (sensible) representation (intuition), to [b] consciousness (apperception) of sensible representations in perception (as *Wahrnehmung*) and [c] acquaintance (comparison), and then from these, finally, to [d] cognition of objects. The Dialectic's treatment of the possibility of further steps beyond cognition per se through reason will be the topic of later sections.

3 Empirical representation (intuition), empirical consciousness (perception), empirical cognition (experience) in the Transcendental Analytic

Though the *Critique* is interested in cognition in general, and especially whether and how apriori cognition is possible, the initial analysis of cognition in the Analytic gives a certain priority to a very specific form of cognition—namely, '*experience* [Erfahrung]', as a species of distinctly '*empirical* cognition' (B125-6). In fact, this priority is announced on the very first main page of the *Critique*, where Kant claims that 'all our cognition begins with experience' (B1, my ital.; cf. A1), in the sense that experience stands as the first manifestation of cognition in our human minds 'according to time' (B1). This sets the tone for the Analytic, since once Kant takes up the understanding as 'the capacity for cognitions' (B137), he begins his assessment of the possibility of apriori cognition by first formulating an account of how experience as the temporally first species of cognition is itself possible.

What I want to demonstrate in this section is that the structure of Kant's account of the conditions for experience as empirical cognition, in both the Analytic of Concepts and Principles, tracks quite closely the genetic account outlined above. That is, Kant builds upon the conditions for sensible *representation* per se (intuition) in the Aesthetic, to show how it is possible for our minds to make the transition, first, from mere intuition to the empirical *consciousness* (apperception) of intuition in perception, and then from empirical consciousness to the empirical *cognition* of objects through such perceptions by using our understanding to form an experience out of them.

We have already reviewed Kant's introduction of the understanding and its basic acts (thinking, judging) at the outset of the Logic. Kant's next step in the 'Analytic of Concepts' is to show that, in performing these acts, the understanding itself serves as

[16] It also helps to bring more sharply to the fore the often-elided distinction that Kant makes between *apperception*, as the capacity for consciousness, and *understanding*, as the capacity for cognition. The understanding is the capacity, not for apperception *per se*, but for representing 'the *unity* of apperception' by 'bringing' the representations of which we are conscious (i.e., that we apperceive) 'to *concepts*' (cf. B103). (I return to this point below).

a source ('origin') of certain representations ('pure' concepts) in the mind, independently from sensibility, representations which thereby contribute content to its acts (cf. B74–B116). Since, however, Kant's interest is in whether and to what extent these acts of thinking can yield cognition, the Analytic then sets out to provide a demonstration that, though these pure contents are supplied by the understanding itself (in the thinking subject), they nevertheless serve as means for cognizing objects. In Kant's words, the Analytic aims to show that the '*subjective* conditions for *thinking*' also have '*objective* validity, i.e., yield conditions for the possibility of all *cognition* of objects' (B122; my ital.).[17]

The presentation of the 'origin' of the pure concepts apriori in the basic forms of activity (thinking, judging) of the understanding provides what Kant calls the 'metaphysical deduction' of these concepts (B159); the apriori 'explanation [Erklärung]' that these pure concepts nevertheless have objective validity and can be used for cognition of objects is what Kant calls the 'transcendental deduction' of these concepts (B117). The transcendental deduction will thus answer the question of 'with what right (*quid juris*)' can we claim to be able to have cognition of objects through these pure concepts (B116). (It will thereby also answer challenges made by Hume that these concepts cannot be demonstrated to have any objective validity whatsoever (cf. B127).) The subsequent 'Analytic of Principles [Grundsätze]' supplies the universal 'rules' for how 'to apply the concepts of understanding to appearances' in order to yield such cognition (B171), by coordinating these concepts with universal features of sensible representations themselves.

Bracketing the vast amount of further questions that can (and should) be raised concerning the Analytic (and the transcendental deduction in particular),[18] what is of chief interest for our investigation here is the more general structure that Kant gives in the Deduction and the Principles to his account of what empirical cognition itself amounts to, and the conditions of its possibility. Crucially here, too, Kant moves from the findings of the Aesthetic, concerning the empirical *representations* supplied by senses (sensation, intuition), to a discussion of the conditions for empirical *consciousness* of these representations (perception, apperception), before finally showing how empirical *cognition* (experience) of objects is possible by way of this consciousness of representations.

This progression is especially well-foregrounded in the A-edition Deduction—though it remains present in the B-edition as well (as I will indicate largely in the footnotes). In the A-edition, Kant begins by reminding us of a finding from the Aesthetic: that the senses supply two sorts of representations (via 'receptivity'): first, a manifold of *sensations*, and then *intuitions*, after the 'synopsis' of this manifold into (spatial and temporal) orders or 'forms' (A94; cf. A97). From this Kant then goes on to give an extended account of what happens once 'receptivity' is 'combined [verbunden] with spontaneity', i.e., when what is delivered by the senses (sensory contents,

[17] We will return to the contrast between mere thinking and cognizing below (cf. Sect. 4.2).

[18] For a thorough and helpful treatment of the transcendental deduction which also seeks to highlight some of the key steps in the genetic structure I am foregrounding here, see Allison (2015). For informative discussion of the various 'syntheses' Kant identifies in this deduction, see Kitcher (1990), Waxman (1991), and Longuenesse (1998).

appearances) is accompanied by 'consciousness' and then 'combined' with concepts from understanding (cf. A97f; B129f).

This process incorporates three 'syntheses'; the progression through these syntheses parallels quite closely, even in its terminology, the three steps [b]-[d] identified above. The first step beyond mere sensible representation is here also named '*perception* [Wahrnehmung]', which is explained as the initial '*consciousness*' of what is given 'in' our intuitions, i.e., a consciousness of *appearances*, by way of a first 'synthesis of *apprehension* in intuition' (A98f). This initial consciousness comes about by 'the running through [Durchlaufen] and then the taking together [Zusammennehmung] of this manifold' of sensation contained in a single intuition, in order to 'distinguish [unterschieden]' impressions from one another and then consciously 'apprehend' all of them in one representation (A99).[19] Perception, as Kant understands the term, thus arises in the transition from [a] merely *having* an intuition, which 'contains a manifold in itself', to [b] '*representing*' the manifold '*as such*' (A99; my ital.), and thereby achieving what Kant here calls '*empirical* consciousness' (cf. A115).[20]

In this first synthesis, our mind forms a further representation of the representations given by our senses.[21] The second synthesis of *reproduction* continues on this track. Once our mind has achieved these initial perceptions by becoming conscious of (apprehending, representing) the individual sensory contents in an intuition, our minds then go on to 'combine' them in various ways, by means of 'an active faculty of the synthesis of this manifold [of perceptions] in us…whose action [is] exercised immediately upon perceptions' (A120). Kant here names this capacity as our 'imagination [Einbildungskraft]', and its activity of synthesizing our perceptions together is *also* called 'apprehension' (A120). This more complex apprehension of the manifold of perceptions takes place by our imagination 'associating' various sensory contents with one another, which requires that our imagination also 'reproduce' past individual sensory contents in order to combine them associatively with new present ones (A100). By allowing our mind to have several appearances distinctly and differentiatedly in consciousness, we are thus able to engage in what Kant later calls 'the comparison [Vergleichung] of appearances' (cf. A126).[22]

[19] Compare: 'by the synthesis of apprehension I understand the composition [Zusammensetzung] of the manifold in an empirical intuition, through which perception, i.e., empirical consciousness of it (as appearance), becomes possible' (B160). In one of the *Reflexionen* corresponding to this passage, Kant directly associates [b] 'to perceive (represent with consciousness)' with the *Anthropology*'s terminology: 'to apprehend (grasp) [apprehendere (fassen)]' (16:343).

[20] Compare: 'what is first given [in intuition] is [a] appearance, which, if it is combined with consciousness [mit Bewußtsein], is [b] perception' (A120).

[21] Cf. Waxman (1991, p. 186f). See also Prauss (1971, pp. 114f, 152f). (Longuenesse 1998, p. 168f), by contrast, rejects the idea that 'perception' is consciousness of something 'subjective' in this sense.

[22] At times Kant thus extends the meaning of both 'perception' and 'apprehension' to cover not just [b] the initial '*simple*' becoming-conscious of an individual sensory content, but also [c] the more *complex* consciousness of the unity of that results from the synthesis of simple perceptions (via reproduction and association) in image-formation—i.e., to cover everything in between [a] mere sensation and intuition and [d] cognition. This broader use is at work, for example, in Kant's oft-cited claim that 'imagination is a necessary ingredient *in perception itself*' (A120n; my ital.), which would make little sense if 'perception' here also meant that '*upon which*' the activity of imagination is 'immediately exercised' (A120; cf. 7:128).

In these acts, we become conscious of the product of our imagination, which is at work synthesizing the associated and reproduced individual sensory contents (the matter of appearances) to yield a multi-faceted sensible '*image* [Bild]' of an object (A120). An image is thus a further new, more complex representation of the manifold sensory representations whose contents we were initially conscious of individually in simple apprehension. This second, more complex apprehension (via reproduction, association, comparison) of the manifold of sensory contents through an image thereby corresponds to what the lectures call [c] 'acquaintance', insofar as it involves consciousness of relations of sameness and difference within appearances (A100f).[23]

It is only the third, final synthesis that finally takes us beyond the (simple or complex) consciousness of sensible *representations* and on to a consciousness of the *object* to which these representations are related. What the results of the first two syntheses of (apprehension, reproduction) actually represent—i.e., what they are directed towards, what we become conscious of in them—continues to be the sensory representations themselves (intuitions, their sensory contents (matter of appearances)). We are not, as of yet, conscious of whatever it is that causes and determines these sensations as effects in the first place, i.e., whatever *thing* causes our intuitions to contain just such-and-such material. Our minds achieve this further consciousness by using our understanding to think of these sensory representations (of which it is now conscious) as effects, as related to this further thing as their cause,[24] thereby thinking of this thing as, e.g., a substance with the requisite power to bring about just these sensations in us. This final step occurs through the 'synthesis of *recognition* in a *concept*'—namely, the concept of the further object to which the appearances are related (A103f).

This shift in focus of consciousness, from representation to object, is not always appreciated even by Kant's more careful recent interpreters, and so it is worth highlighting the evidence of this shift in the A-edition transcendental deduction itself. Whereas in the first two syntheses, 'we have to do only with the manifold of our *representations*' (i.e., '*appearances* as *sensible representations*'), the third step to recognition requires that we think of 'that X which *corresponds* to them (the *object*)', an 'X' which (unlike these representations (appearances)) lies '*outside of* [außer] our power of representation', and ultimately 'is something *distinct from* all our representations' (A104; my ital.). In this third step, we become conscious of appearances, not just as *objects* themselves (as occurs in perception), but as '*representations* which in turn *have their object*' (A109; my ital.)—i.e., as representations which themselves '*designate* [bezeichnen] an object', as Kant puts it in a later passage (B235; my ital.). This

[23] It is worth emphasizing, first, that Kant here (e.g., at A120n) claims only that imagination is involved in *perception*, and only in this technical sense of the act of forming *images* out of appearances—*not* that the imagination is involved in *intuition* or the mere *having* of an appearance (pace Gomes 2014, p. 8, and McLear 2016: §5.1.2, #9). Secondly, Kant's embrace of *images*, rather than e.g., *substances*, as the immediate objects of perception—and hence, his embrace of images as a necessary transitional object of consciousness on the road to achieving cognition in experience—would seem to speak fairly directly against more recent 'direct realist' interpretations of Kant's account of intuition, perception, and experience itself (as in Allais 2015 and McLear 2016). For helpful discussion of Kant on images, see Makkreel (1990) and Matherne (2015).

[24] Recall Kant's description of 'thinking' as 'the act of relating [beziehen] a given intuition to an object' (B304).

is achieved by recognizing that the representations of which I am already conscious have a 'unity' that is 'made necessary' by their common cause (or 'common ground'; cf. B104)—namely, the object itself (A105).

This shift of consciousness allows us, finally, [d] to '*cognize* [erkennen]' the *object* through its appearances in intuition (A105). Our understanding makes use of the 'concept of an object' to which a given series of appearances are all related, in order to 'unify' these appearances in relation to this object, and thereby 'recognize' it (the object) through its appearances—i.e., it 'thinks' an object 'in relation to' these intuitions (recall B74; cf. Sect. 2 above). As Kant also puts it here, we 'thereby *determine an object for* their [i.e., the appearances'] intuition' (A108; my ital.). To take Kant's example here: to 'cognize the *number* [Zahl]' of items in some 'group [Menge]', it is not sufficient to merely have the 'units [Einheiten] hovering before me in the senses' in representation, nor is it sufficient to become conscious of each individual unit on its own (A103). Rather to cognize a number on the basis of this, I must also be conscious of 'the unity of the synthesis' of each separately noticed unit with the next, a unity I become conscious of through my act of 'the successive addition of one to one [Einem zu Einem]' (A103). Upon completion, I am now conscious, not just of any of the individual representations ('units') or of their sameness and difference from one another, but am now conscious of a further object which is distinct from each of these—namely, the number itself.[25]

As we have already anticipated, this act of recognition of an object by way of the consciousness of representations of sense is what Kant calls '*experience* [Erfahrung]' as empirical cognition. Experience consists in the representation of a series of perceptions (intuitions of which I am conscious) as standing in 'a thoroughgoing and lawlike connection', 'in accordance with concepts', due to their common relation to the object of the relevant concept (A110).[26] Experience here has as its 'principle' neither mere intuition, nor imagination, nor even apperception or consciousness, but only the necessary 'unity' of apperception that is represented first and foremost by the understanding (A118–19).[27]

[25] For a discussion of important further aspects of Kant's account of counting, arithmetic, and representation in pure intuition, see Sutherland (2008).

[26] The B-edition again emphasizes that this final 'unity of consciousness' of these representations in a concept of the further object is 'that which *alone* makes out [ausmacht] the relation of representations *to an object*' for our mind, such that, 'consequently, *they become cognitions*' (B137; my ital.). This is also what is behind Kant's claim that the relevant *object* cognized in experience is 'that in the *concept* of which the manifold of a given intuition is *united*' (B137). Note that Kant does not say either that the object in question *is* the manifold itself or that it *is* the concept. Note also, however, that Kant does not claim that the object is the *result* of the uniting of a manifold in a concept, as if the relevant synthesis brought the object into *existence*. Kant has rejected this idea already at the outset of the Deduction, emphasizing that the synthesis which constitutes experience '*does not bring forth* [hervorbringt] its object as far as its *existence* is concerned'; rather, it only serves to '*determine* [bestimmen]' the object, in relation to its sensible representations, via its *concept*, so as to make cognition of it possible (B125; my ital.). This should point us away from more radical 'constructivist' interpretations of the objects of experience (empirical cognition), and toward a decidedly more realistic construal, as in Ameriks (2012) and cf. Tolley (forthcoming-a).

[27] As noted above, my analysis is therefore meant to help foreground an oft-overlooked distinction between *apperception* per se and 'the *unity* of apperception', where the latter consists in a further representation of the former (via concepts). This distinction parallels (grammatically and conceptually) other distinctions Kant draws between, e.g., intuition per se and 'the unity of intuition', and between experience and 'the

Once we are alive to it, it quickly becomes evident that this same progression—from intuition as mere *representation*, through perception (apperception via apprehension) as *consciousness* of this representation and the complexity of its constituents, to experience as *cognition* of the object of this representation – can be found throughout Kant's theoretical writings.[28] Even later within the *Critique* itself, the structure of this progression continues to shape Kant's discussion in clear ways. This is especially evident once he shifts from the 'Analytic' of the concepts (categories) involved in empirical cognition, to the 'Analytic' of 'principles' (rules) for applying these concepts to sensible representations to yield such cognition. In fact, the key steps of this progression are writ large in the very titles of the first three Principles themselves, which are: Axioms of *Intuition*, Anticipations of *Perception*, Analogies of *Experience* (cf. B200f).

What is more, Kant consistently draws an important systematic division between the first two Principles and the third—which is just as we would expect, given the importance we have seen accorded to the transition from perception to experience itself, as marking the shift from mere consciousness of representations to the cognition of the objects of representations. Whereas the Axioms and Anticipations are said to 'pertain to *appearances*' and are principles for 'the determination of the *appearance*' (B221), Kant singles out the Analogies, by contrast, as having 'the peculiarity that they *do not concern the appearances* and the synthesis of their empirical *intuition*, but merely *existence* [Dasein] and their [i.e., appearances'] *relation* to one another with regard to this existence of theirs' (B220; my ital.). In other words, the first two Principles therefore specify rules for applying categories directly to *sensory representations* themselves—i.e., to their *form* and its 'extensive' (quantitative, homogeneous) magnitude (Axioms), and to their *matter* (sensations) and its 'intensive' (qualitative) magnitude (Anticipations). The Analogies, by contrast, specify rules for applying the categories to *existence* itself, in relation to appearances—i.e., to the *substances* which *cause* the sensations that make up appearances and thereby stand in causal *community* with our minds and with each other. For this reason, the Axioms and the Anticipations are grouped by Kant under the heading of '*mathematical* principles', because they 'pertain merely to *intuition*', while the Analogies, by contrast, are classified as

Footnote 27 continued
unity of experience', among others. In each case, the former picks out something which exists prior to and independently of the latter, while the latter consists in something composed out of (cases of) the former. (Only the *unity* of apperception is said to be (or depend on) the understanding (cf. A119).)

[28] One particularly striking case is in Part II of Kant's *Prolegomena*, i.e., the Part which corresponds to the *Critique*'s Analytic. There Kant claims that at the 'basis' of experience lies both [a] *intuition* 'which belongs solely to the senses'—or rather, and more specifically, [b] 'an intuition *of which I am conscious*, i.e., *perception* (*perceptio*)'—as well as 'judgment', which 'pertains merely to the understanding' (4:300). Initially, however, I judge only in such a way that [c] 'I merely compare [vergleiche] the perceptions and combine them in a consciousness *of my state*', so as to make a 'judgment of perception', which consists in a 'connection of perceptions *within my mental state*'—but crucially 'without relation [Beziehung] to *the object*' which this state itself represents (4:300; my ital.). (For this reason, Kant says such a judgment 'has only *subjective* validity' (ibid.).) To become conscious *of an object* 'through' these perceptions—or, as Kant again here describes it, [d] to '*cognize*' the object—I must judge not merely about *my* own mental *state*, but judge through these states about the *object* that this state represents, to form a 'judgment *of experience*' (4:298–9).

'*dynamical* principles', because they 'pertain to the *existence* of an appearance in general' (B199; my ital.).[29]

4 The role of concepts and consciousness of sensation in cognition

If this gives us a better sense of how cognition first 'arises' with and in experience (empirical cognition), let me now highlight two central theses about empirical cognition that also emerge from these same passages: the necessity of *concepts* in cognition, and the necessity of *consciousness of sensation* in cognition. In the following section I will take up the question of whether and how these theses are extended to cover *non*-empirical cognition.

4.1 The necessity of concepts.

The necessary involvement of *concepts* in empirical cognition is actually something Kant already implies on the very first (main) page of the *Critique*, in the course of affirming the developmental thesis about *experience* being the first stage of cognition:

> There is no doubt that *all our cognition begins with experience*; for how else should the capacity for cognition be awakened into exercise if not through objects that stimulate our senses and in part themselves [a] produce [bewirken] representations, in part bring the activity of our understanding into motion to [b]-[c] compare [vergleichen] these, to connect [verknüpfen] or separate them, and thus to work up the raw material [Stoff] of sensible impressions *into* [d] *a cognition* of objects that is called experience? As far as time is concerned, then, no cognition in us precedes experience, and with this every cognition *begins*. (B1; my ital.)

[29] In fact, this distinction among the *principles* simply extends a parallel distinction among the pure *concepts* ('categories') that Kant had introduced in passing already much earlier. The categories themselves also 'can be analyzed into two divisions', such that the first two 'mathematical' kinds of categories (quantity, quality) 'are directed [gerichtet] at objects of *intuition*', whereas the second two 'dynamical' kinds of categories (relation, modality) 'are directed at the *existence* of these objects (either in relation to one another or to the understanding)' (B110; my ital.; cf. B692). The significance of this crucial differentiation can be seen perhaps especially in relation to the Analogies of Experience, which depend precisely upon our being able to draw a distinction between being conscious of the *subjective* order 'in' our *perceptions* (sensory representations, appearances) and cognizing the distinct *objective* order 'in' the 'existent' *objects* (bodies and our own soul) represented by, and *not identical with*, these perceptions ('apprehensions'; B235). This again puts considerable pressure on the familiar idea that, for Kant, the object of experience 'is nothing but the sum of these representations' (Allison 2004, p. 234)—as should Kant's own explicit claim (noted above) that experience '*does not bring forth* [hervorbringt] its object as far as its *existence* is concerned' (B125; my ital.), despite the fact that experience does 'bring forth' a *representation* of the object. For a more (ontologically speaking) realist interpretation of the objects at issue in the Analogies, compare Watkins (2005, pp. 199–217). Smit (2000, p. 240f) rightly recognizes Kant's own argument for a distinction in cognition between mediating representation and object, but does not yet connect it with this progression of technical terms involved in the Analytic. Van Cleve (1999, p. 74f) presents an interesting case of an interpretive recognition that many of the conceptual differences I am highlighting here *should* be in play in Kant's discussion of these topics, but without any apparent recognition that Kant *himself* deploys technical terms to capture just such distinctions.

Mere representations brought about by 'sensory impressions' (i.e., *sensations*) are *not yet* themselves 'cognitions of objects'; they only provide the 'material' for something else that is a cognition. They become a part of a cognition in virtue of the fact that they are taken up by the activity of understanding (comparing, connecting, separating, etc) and are then 'worked up' into something more complex, something which is a 'composite [Zusammengesetzte]' of both sensory 'stuff' and intellectual acts—something here already identified as 'experience' (B1).[30]

Also from very early on in the *Critique*, Kant explicitly denies that *intuitions* alone, in the absence of concepts (the activity of understanding), will count as cognitions either: 'intuition without concepts cannot yield [abgeben] a cognition' (B74), because without the consciousness afforded through thinking, intuitions per se remain 'blind' (B75). One key reason for this is that, as we saw above, merely having an intuition does not yet even involve consciousness of the intuition itself (its manifold sensory content, the appearance). This is only achieved in perception. A fortiori, it does not include the consciousness of the relation to the object that the intuition represents. Rather, for cognition of this object to 'arise [entspringen]', Kant claims that it is necessary first 'to make intuitions intelligible [verständlich] (i.e., to bring them under *concepts*)' (my ital.), so that intuitions and concepts 'are unified [sich vereinigen]' (B75). This much we have anticipated above. Kant goes further, however, in these passages and affirms the involvement of a concept as a 'condition [Bedingung] under which *alone*' cognition is possible (B125; my ital.); '*all* cognition *requires* [erfordert] a concept' (A106; my ital.). This more general point is reiterated clearly and forcefully many times throughout the remainder of the book.[31]

Despite this consistent refrain, there has been a persistent tendency (especially recently) to read Kant as if he were to classify intuitions themselves already as a kind of cognition. There is (to my knowledge) only a single passage in the *Critique* (perhaps alone in the works Kant himself published) which—at least initially—might seem to unequivocally suggest as much.[32] This is a well-known and oft-cited passage at the mid-point of the *Critique* (B376–77), where Kant writes that 'cognition (*cognitio*)…is either intuition or concept (*intuitus vel conceptus*)'. Here Kant might appear (and has in fact appeared to many of his readers, including my previous self) to classify

[30] Compare the first sentence of the A-edition: 'experience is without doubt the *first product* that our understanding brings forth as it works on the raw material of sensible sensations [sinnliche Empfindungen]' (A1; my ital.). That these first uses of 'experience' maintain consistency with the wide array of texts cited above (which sharply distinguish experience from sensation, intuition, perception, etc.) speak against earlier claims by C.I. Lewis and Lewis White Beck (recently endorsed by Guyer (1987, p. 79f) and Van Cleve (1999, p. 73f)), that Kant uses 'experience' here (and elsewhere) in two different senses, the first of which simply identifies it with sensations. (This suggests that we should also view with caution Van Cleve's proposal that 'experience' throughout the *Critique* might have as many as eight different senses (cf. Van Cleve 1999, p. 74).)

[31] Compare B149, B342; see also 7:140, 20:273. Recall as well that Kant characterizes our understanding *in particular* (the capacity for concepts) as 'the capacity for cognitions' (B137).

[32] There is also one passage from Jäsche's 1800 edition Kant's lectures on logic which might also be read in this way (cf. 9:91), along with several of Kant's unpublished (and often quite fragmentary) *Reflexionen* (cf. 16:86, 88, 538).

intuition as a *species* of cognition on its own—especially when it is read out of its context.[33]

While this 'species' reading of this sentence surely has some initial plausibility, the key thing to note is that it is not at all forced on us by the context. Rather, here Kant instead can simply be pointing at intuition as a necessary *constituent* of cognition—saying roughly: looking *within* cognition (among its component parts), we find partly intuition, partly concept.[34] Unlike the species reading, this 'constituents' reading has the distinct virtue of allowing Kant's position here to remain consistent with his many assertions both of the insufficiency of intuitions alone to yield cognition and of the necessary involvement of concepts for cognition—along with the otherwise thorough-going absence (in his published works) of claims elsewhere that intuitions *are* themselves cognitions. The reading we are developing here, moreover, aims to prioritize the sizeable quantity and direct quality of the aforementioned passages, rather than opting for a non-required reading of a single, quite grammatically compressed sentence.

What is more, once we broaden our vantage-point from this single sentence to the passage as a whole, I would propose that the context strongly suggests that Kant does not mean to be giving a strict taxonomical division of representations into species, species of species, etc., but in fact means to be highlighting the very same stepwise development of levels or grades of representations that I have been charting since the outset. For Kant introduces this passage by saying: 'here is a *progression* [Stufenleiter; step-ladder] of the kinds of representation', and the 'Stufenleiter' itself proceeds along what are now, for us, very familiar lines: from [a] '*representation*' as such, to [b] 'representation with *consciousness*' as '*perception*' (simple apprehension), to [c] consciousness of '*sensation*' in particular as 'related merely to the subject, as the modification of its state' (acquaintance, complex apprehension), to [d] '*cognition*' as perception made 'objective', via the understanding, in experience, through concepts together with intuitions (cf. again B376–77).[35] In the particular sentence quoted above, we can therefore read Kant as simply pausing to remind us about what cognition itself *consists in*: it can be considered either as to the intuition it involves, or as to its concept.[36]

[33] Compare George (1981, p. 241), Smit (2000, pp. 240–247), Hanna (2001, pp. 45–46), Okrent (2006, p. 97f), Tolley (2011: §3), Schafer (forthcoming: §§1–2).

[34] This might also be suggested by Kant's use of the Latin 'vel' (inclusive disjunction) rather than 'aut' (exclusive disjunction).

[35] Once in focus, the structural parallel of the Stufenleiter to the progression of 'grades' we met with above can be seen to continue even beyond the step to cognition (cf. B377), as Kant's 'ladder' here goes on to climb, first, to the understanding's use of 'pure concepts' (to [e] further 'understand' experience), and then to reason's use of *ideas* to 'go beyond the possibility of experience' (i.e., to gain [f] insight and [g] comprehension of the conditions of the objects of experiences).

[36] It might be objected that this breaks the stylistic continuity of the passage, since after 'either intuition or concept' Kant might be read as going on to then divide concepts in particular into further species: either empirical, or pure; either pure from understanding, or pure from reason—rather than noting the progression from cognition to understanding, insight, and finally comprehension. I agree that this is a possible reading of the remainder of the passage and it is therefore possible also to see the further context as itself providing some reason to consider the sentence itself as identifying species of the previous 'step'. To repeat, however:

4.2 The necessity of consciousness of sensation.

The second thesis that also emerges from these passages is that, however necessary it may be, the involvement of concepts (thought) is *not sufficient* to mark a given mental act as a cognition, whether empirical or otherwise. For Kant rejects the idea that any exclusively conceptual (intellectual) representation—what we can call '*mere* thinking' (representing 'through concepts' alone (cf. B94))—could count on its own as a cognition. On this point, too, Kant is quite direct: 'concepts without intuition corresponding to them in some way' also cannot 'yield' a cognition (B74); it is 'just as *necessary* to make the mind's concepts *sensible* [sinnlich] (i.e., to add an object to them *in intuition*)' as it is to make the intuitions 'intelligible' (B75; my ital.). Otherwise, 'if an intuition corresponding to the concept could not be given at all', the concept itself 'would be a *thought* as far as its form is concerned, but…by its means no *cognition* of anything at all would be possible'; rather, Kant insists that 'for us *thinking* of an object in general…can *become cognition* only insofar as this concept is related to objects of the senses' (B146; my ital.).

Yet if it is therefore clear *that* the absence of intuition renders mere thinking insufficient to count as cognition, this does not yet tell us *why* intuition is necessary. What, then, is distinctive of cognition in particular, over and above what could already be achieved through thinking about an object in the absence of an intuition of it?

Several interpreters suggest that we lack cognition of an object in the absence of an intuition of that object because this absence entails that we cannot *successfully refer* to that object.[37] Other interpreters have argued instead that what is missing in mere thinking is that we cannot refer in a sufficiently *discriminating* way to particular individual objects in the absence of intuitions of them, but only in an indeterminate manner, and that the determinate, discriminating reference made possible by intuitions is what is thereby distinctive of cognition alone.[38]

Now, both interpretations do have textual support, as Kant does at times seem to describe the absence of the intuition of an object as implying that the concept or thought of that object actually 'has no object' (cf. B146), or is left 'indeterminate' (cf. B307, B692-3). Even so, I will argue now that these ways of putting things do not fully capture Kant's view, which is more nuanced than this.

For one thing, at least in some cases, Kant thinks that it is at least possible that we can succeed in thinking about, and hence referring to, an object without any intuition of that same object. Assume, as Kant does, that we cannot have any intuition of God. Nevertheless, if God does exist, then when I think the thought: <God exists>, my thought does not stop short of that state of affairs, because it simply would be true, and hence 'correspond to its object' (cf. B82-3). And even if it is false, Kant thinks that the false judgment *still* has an 'object to which it is related, albeit by

Footnote 36 continued
my aim here is not to show that the species reading of this sentence itself is impossible, but only that it is not necessary. (Thanks to an anonymous referee for pressing this point.)

[37] See Anderson (2015); cf. Hanna (2001, pp. 3, 88). George (1981) even goes so far as to offer 'referring thought' as a more apt rendering of 'Erkenntnis'.

[38] See Schafer (forthcoming) and cf. Kemp Smith (1918, p. 214).

'contradicting' it (B83-4). In fact, Kant himself holds not only that we can form this thought, and thus (possibly successfully) refer to this object, but also that we are rationally required (by our practical reason) to hold this particular judgment to be true (to believe it; cf. 5:467f)—i.e., to hold that it does successfully refer—all without any intuition corresponding to its subject-term <God>. What is more, this particular thought <God exists> allows us to think of an object which Kant himself insists is 'determinable or even determined *as an individual thing* through an *idea* alone' (B596; my ital.)—hence, it would seem, determinable without any recourse to intuition.[39]

Based on our foregoing analysis here (cf. Sect. 3), my own alternative proposal is that what is lacking in mere thinking, but present in cognition, is a further and very specific kind of consciousness: the consciousness of a *real relation* that obtains between one of our representations and its real object. As we saw above, it is just this 'recognitional' consciousness of the 'existent' object of an appearance which is added in the transition from perception of the sensible manifold of appearances (consciousness of their qualities), to experience as empirical cognition of the real ('existent') objects (substances) responsible for bringing about or causing this manifold. This, however, equally involves a new consciousness of the sensations themselves as effects of real causal interaction—i.e., as themselves bearing a real relation to these further objects. In short: empirical cognition makes essential use of both the initial immediate consciousness (in perception) of specifically sensible representations, and the mediated relational consciousness of these same representations as having been 'received' as 'effects' by other objects.

Mere *thinking*, by contrast, cannot make use of sensory representations immediately present in consciousness in this way, because (by definition) *mere* thinking is exclusively intellectual in its content. The only representations that Kant thinks our understanding is capable of 'giving' itself for mere thinking are its own 'pure concepts' (cf. our discussion above of their 'metaphysical deduction'). Yet Kant thinks we can both 'form [machen]' these concepts entirely apriori and use them for 'thinking of an object in general' without being in any 'immediate relation to the object', as Kant puts it in the *Prolegomena* (4:282). In fact, Kant holds that no concept on its own can make us conscious of whatever real relation it might have to the objects it represents. At best, a concept makes us conscious of a general property ('mark') which might be present in several things, rather than putting us in any immediate relation to any thing itself.

The absence of any consciousness of a real relation to objects in mere thinking with concepts is a key part of why Kant claims every existential judgment, including those about the objects of the pure concepts, is *synthetic*, rather than analytic (cf. B626): neither the existence of an object itself, nor any real relation between the concept and any real object, is ever 'contained in' the content of the concept itself, such that it could be discovered through analysis of what is (already implicitly) 'thought in' the

[39] We think of this individual according to a set of features (being 'the sum-total of all reality', 'the unlimited', 'the all', etc.; cf. B603f) that Kant thinks sufficiently distinguishes it from *every other* object. Another example might be the fundamental moral principle (law): there is only one *individual* such principle, to which we can (and must) *successfully refer* and are conscious of in thinking in a highly *discriminatory* way, presumably not on the basis of any *intuition* of this law or principle (though see discussion in the footnotes to Sect. 6 below).

concept itself. In Kant's words: 'in the *mere concept* of a thing no characteristic of its existence [Dasein] can be encountered [angetroffen] at all' (B272). No case of mere thinking (representing through concepts alone) contains representations that can on their own make us aware of the existence[40] of a real relation of the representation to an existent object beyond itself.

Just this *is* what is enabled, however, via 'empirical consciousness' of *sensation* in perception, in the course of achieving the experience of a real object. This is why Kant holds that 'cognizing the *actuality* [Wirklichkeit] of things *requires* [fordert] *perception*, thus *sensation* of which one is conscious' (B272; my ital.). Perception, as the immediate awareness of a passively given sensory manifold in the mind, enables the further consciousness of this manifold *as* passively received.[41] In this way, consciousness (perception) of sensation does something that mere thinking cannot: it enables the further consciousness of the existence of a real relation between this manifold and a further existent object—namely, the object = X which is the ground for the sensory appearance, and which is thereby cognized in experience.[42]

The reason why a proposition like <God exists> remains merely a *thought* rather than a *cognition* of its object, even in the case where God does exist, is therefore not that the proposition fails to *successfully refer* to its object (it can succeed in expressing a truth, something that obtains), and also not that it does not *sufficiently discriminate* its individual object from others (the subject-concept can succeed at this as well). Rather, it is that the representations involved in the thought alone (the pure concepts) do not make us conscious of the reality of the relation of these concepts

[40] It can of course make us aware of the *concept* of existence, the *concept* of a real relation to an existent object, etc; it can also make us aware of a *representational* (or intentional) relation to some object or other (i.e., whatever object we are thinking about), including one which happens in fact to exist.

[41] Compare: sensation is that 'by which one *only* can be conscious *that the subject is affected*, and which one *relates to an object in general*' (B207–8; my ital.); sensation is 'that in general which *corresponds to*' our concept of reality (B182; cf. B207–18). On this 'representational' function of sensation, see Jankowiak (2014).

[42] While we have focused on real *existence* or actuality, it is worth noting that Kant officially extends the scope of cognizing to include objects whose sensations we are not presently or currently ('actually') perceiving, but whose (possible) sensations we can nevertheless demonstrate through reasoning to 'agree with the formal conditions of experience (with respect to intuitions and concepts)', and in this way can be shown to be really *possible* as sensations. Kant takes this to amount to cognizing the *object* of these possible sensations as an object of *possible* experience (B265). This suffices to demonstrate what Kant elsewhere calls the 'real possibility' of the object in question, beyond the merely logical possibility of its concept (cf. Bxxvi-fn). Hence, though (as we have seen) his emphasis in the Analytic is largely on cognizing the '*existence*' in relation to appearances, Kant is actually working with a broader notion of 'reality' which includes both actuality and real possibility (cf. Bxxvi-fn). Compare Chignell (2014).

There is the important further question here as to whether this 'object = X' is something which has a way of being 'in itself', and should thus also be considered to be a 'thing in itself' with (so-called) 'noumenal' reality or existence. Though I cannot hope to argue for it here, I find accounts along the lines of Ameriks (2012) to be the most convincing, that Kant believes that the objects of experience, and hence of empirical cognition (i.e., physical bodies, our own soul) do also have a way of being 'in themselves', even if we cannot cognize this aspect in anything other than the most indirect and 'indeterminate' way. Note that a view along these lines would still allow for appearances to belong to a distinct world from these objects, and so is not a two-aspect account of appearances themselves—though it may be a two-aspect account about features of the objects of these appearances. (Thanks to an anonymous referee for pushing me to clarify this point.)

to the object represented, nor do they make us conscious of the reality of the object itself.[43]

5 Extending the account to pure (non-empirical) cognition

Even if the foregoing helps illuminate the structure of empirical cognition, what remains to be seen is how this framework can be extended to cases of non-empirical or 'pure' cognition, as well as what differentiates the stage of cognition in general from the later, higher stages involving reason. The very idea of pure cognition might seem especially problematic, in light of the second thesis above concerning the necessity of a consciousness of sensation, since 'pure' for Kant just means being a representation such that '*nothing* which belongs to sensation is to be found in it' (B34; my ital.). As is well-known, however, Kant himself is quite adamant about the possibility of cognition whose contents are entirely 'pure' in just this sense: they are 'independent not just of experience but of *all impressions* of the senses…in which *nothing* empirical is mixed' (B2–3; my ital.). These are the cognitions that Kant thinks we find in certain analytic judgments as well as the synthetic judgments of pure mathematics and philosophy itself, with Kant classifying the latter two cases of 'rational cognition [Vernunfterkenntnis]' (B740–1; cf. B3–18; 4:267–9). Philosophical cognition in particular would seem especially distant from any reference to sensation, insofar as it is not just cognition achieved 'through concepts' but cognition which 'confines itself [hält sich an] *solely* to general concepts' (B743; my ital.; cf. 4:469).

Now, as I will show below, despite the purity of their *contents*, Kant does seem to think that the standing of these judgments as *cognitions* will depend ultimately on the demonstration of the validity of the relevant mathematical and philosophical concepts with respect to sensation. While it has been noted before that Kant thinks that geometrical judgments counts as cognitions only insofar as it can be 'applied' to real (physical) objects, what remains less well appreciated is Kant's account of *how* this application itself ultimately transpires and especially what this implies geometry is 'about' when considered independently of this application. As I will show in what follows, the general structure of the progression from representation through consciousness to cognition also provides a useful template for understanding Kant's account of how this sort of pure cognition is possible. In this way, I hope to at least make plausible the

[43] That is, either its actuality or even its real possibility (cf. previous note). Now, at this point it might be wondered whether, in making me '*conscious* [bewußt]' of a real relation to an object, cognition itself now is being understood in decidedly epistemic terms after all, such that cognizing an object might now have turned out simply to consist in its being '*known* [gewußt]' by me that the object in question is real. In fact, in one passage Kant himself might seem to suggest as much, writing that 'to *cognize* an object, it is required that I be able to *prove* [beweisen] its possibility (whether by the *testimony* [Zeugniß] of experience from its actuality [Wirklichkeit] or apriori through reason)' (Bxxvi-fn). (Thanks to the anonymous referees for raising this as a worry for my account.) As the passage continues, however, it seems that Kant does not actually mean to be specifying the conditions for the, as it were, first-order *cognizing* of X, but rather conditions for the second-order *claim* to cognize X, insofar as he makes clear that what is at issue is what is 'required to ascribe [beilegen] objective validity to a concept' (ibid.). For further discussion of a first-order/second-order distinction along these lines (between what is required for cognizing X vs. what is required to legitimate the claim to (be able to) cognize X), see Watkins and Willaschek (2017).

idea that the two theses singled out above about empirical cognition—the necessary involvement of concepts, and the necessary involvement of consciousness of sensation (cf. Sect. 4 above)—are taken by Kant to also apply to pure (non-empirical) cognition, though perhaps the second only in slightly modified form. Since it is most likely the most familiar case, I will focus first and foremost on Kant's account of the cognitive standing of pure *geometrical* judgment, before saying something more briefly about how a similar account can be extended to analytic and philosophical judgments.

Geometry, for Kant, is 'a science which determines the properties of space synthetically and apriori' (B40). As was suggested above, Kant thinks that what we most primitively mean by 'space' is what provides the 'form' of outer intuitions, within which outer sensations are ordered (cf. B34). To play this role, Kant thinks that this space must itself 'lie ready in the mind apriori' and so 'be able to be considered in abstraction from all sensation' (B34). I can consider this form when I 'abstract from all that belongs to sensation, like impenetrability, hardness, color, etc.', since 'something else of the empirical intuition still remains for me—namely, extension and figure' (B35). In this way, the form of outer empirical intuition 'can be found in us apriori, i.e., *prior* to [vor] *all perception*' (B41; my ital.); in fact, it is 'in my subject *prior to* [vor] all *actual impressions* through which I am affected by objects' (4:282; my ital.). Because of this, the form of outer intuition itself can therefore be 'given' to the mind *apriori* in a 'pure' *intuition* (B34–5).

Kant is clear, however, that though this form can be *given* apriori (whereas the matter (sensations) can only be given aposteriori), this mere giving does not yet suffice for any *cognition*. For one thing, what is given is the form of a representation (outer intuition), rather than the form of a thing. What is more, the 'giving' of this form will itself initially amount only to the mere having of a representation (a pure intuition) in mind, and so not yet incorporating even consciousness of what is given. Just as, in the empirical case, we must first become conscious of [a] given empirical intuitions and their contents (sensations) in [b] perception (through 'apprehension [Auffassung]'), so too, in the pure case as well Kant thinks we must first become conscious of [a*] our apriori 'given' pure intuition and its contents through [b*] a 'grasping together [Zusammenfassung]' of its (pure) content (e.g., space), such that its content is 'represented *as* object' (B161n; my ital.).

In fact, Kant explicitly insists that, when this takes place in relation to pure intuition, it is the very same (first) 'synthesis of apprehension' that is responsible for such 'grasping together' as was in the empirical case, albeit in a 'pure' and apriori version (A99). It is also the step to representing the space of intuition itself as an object which likewise is said to involve the capacity for apperception (B153-54); and tellingly, it is precisely this consciousness (apprehension) of space itself 'as object', rather than the mere intuition of space, that Kant claims 'one actually needs in geometry' (B161n).[44]

[44] For the 'metaphysical' priority of the pure intuition of space with respect to any specifically geometrical representation (let alone *cognition*), see 20:419f. This is manifest in the very ordering of the Aesthetic itself, which demonstrates (in the Metaphysical Exposition) that the 'originary' representation of space is an intuition (B37-40) prior to showing (in the Transcendental Exposition) that it thereby can function as a 'source' for apriori cognition for geometry—as opposed to its already *being* a cognition in its own right (B40–41, B55; cf. Shabel 2004). Here I disagree with Waxman (1991: cf. 219f) about the space of

Geometry itself, however, cannot rest content with the simple apprehension or consciousness of space per se. Rather, just as our [c] *acquaintance* with our sensations comes through association and comparison, so too must we [c*] 'think *into*' the pure intuition various 'delimitations' of the given form (B39); in the case of space, we come to form concepts like <line> and <triangle> (B39). And here, too, Kant claims that this raising of our consciousness takes place through an apriori synthesis parallel to the second imaginative synthesis above, what Kant calls the pure apriori 'figurative synthesis' of the imagination (cf. B151), something which also results in an 'image', albeit now a '*pure* image [reines Bild]' of space itself (cf. B182; my ital.).

Yet even this more refined consciousness of pure intuition, its content, and its features will not be sufficient on its own for cognition of things. Here too Kant draws a distinction between all of the foregoing ([a*]-[c*]), which will yield *consciousness* of the contents of our pure *representation*, and a further step [d*] the apriori *cognition* (determination) of real *objects* through such consciously apprehended representations. That is, the pure geometrical judgments about the space of pure intuition, considered per se, actually turn out to be *on par with* empirical perception, apprehension, and acquaintance, in the following crucial respect: in both cases, the 'object' in question, that of which we become conscious, is *not* a external *real object* cognized in (outer) *experience* (something 'existent', a body, corporeal *substance*). Rather, in geometry, the object in question is merely the space which is the pure form of our *representation*, i.e., that space which is contained 'in' our representation, in which sensations (representations) are ordered to yield outer empirical intuitions (i.e., further representations).

To transform our 'pure' *consciousness* of the space of intuition in geometry into a genuine *cognition* of real objects, we must actually take up a perspective *beyond* the mere consciousness (representation) of this space that we have achieved in geometry. In the B-deduction Kant is very explicit about this point: neither the pure apriori *intuition* of space itself, nor even the geometrical concepts we achieve by 'applying' pure mathematical concepts (e.g., of quantity) to this pure intuition, are '*by themselves* cognitions'; they cannot be considered cognitions, '*except* insofar as one *presupposes* that there are *things* which can be presented [sich darstellen] to us only in accordance with this pure sensible intuition' (B147; my ital.)—i.e., things which (can) cause the sensations which (can) fill this form (space), or, in other words: the things we then go on to cognize in experience.[45] Strictly speaking, geometrical judgments per se have as their immediate objects the form of our *representations* of objects, and not *real objects* (things) themselves (or *their* forms).

To count as cognizing things through geometrical judgment, therefore, we must also presuppose a consciousness of the sensations that fill this space, or at least 'anticipate' them as to their formal qualitative features, and thereby determine which objects are being represented by the qualitatively diverse ways in which sensations fill space at a

Footnote 44 continued
intuition depending on apprehension and imagination (and similarly reject his account of the apprehension-dependence of time; cf. 194f); compare Tolley (2016b); cf. as well Onof and Schulting (2014).

[45] Compare: 'the representation[s] of the object with which [geometry] occupies itself, are generated [erzeugt] in the mind completely apriori, [but] they would still not signify [bedeuten] anything at all if we could not always exhibit [darlegen] their significance in appearances (empirical objects)' (B299) (Cf. Smit 2000: 244n–5n).

moment and then change diachronically across moments in time. In other words, our minds must move beyond noticing the features of space delimited in the Axioms of Intuition, and incorporate both the features of sensation delimited in the Anticipations of Perception, as well as consciousness of the changes in our perceptions of sensation across time, organized according to the concept of an object distinct from this subjective series of perceptions, in order to constitute an experience of substances and causes according to dynamical principles of the Analogies. Because the space represented in pure intuition 'grounds' all outer empirical intuitions by providing the form for the various orderings of the sensations effected in us, of which we then become conscious in perception, this space thereby functions to make possible the experience of these objects as well (cf. B38, B46). Geometrical judgments themselves count as cognitions only because of the universal and necessary connection of their object (intuitive space) to the series of empirical intuitions and the constitution of outer experience.

Now, to *prove* that the space of outer intuition has this relation to outer experience, and to *prove* that consciousness of variation in outer intuition determined according to dynamical rules is something that amounts to cognition of outer objects—this further step is the task of *transcendental philosophy*. Only here can it be demonstrated that this pure intuition (of which we are conscious in geometry) really does contain something that can be 'applied [angewendt]' universally and necessarily to outer empirical intuitions, thereby contributing to necessarily outer 'perception' as consciousness—now not of space itself, but of 'things in space' (via 'representations accompanied with sensation'), in the course of ultimately bringing about outer experience as 'empirical cognition' of real things (B147; my ital.).[46] It is only because our geometrical judgments about the pure intuition of space and its content thereby serve to make us aware of the general form in which *effects* from real objects (i.e., sensations) will (universally and necessarily) be ordered, that the consciousness which geometrical judgments themselves contain can be counted as apriori *cognitions* of these same real objects themselves, as to the universal and necessary features of their appearances (B40, B48).

Let me now show very briefly how a similarly 'indirect' relation to sensation is demanded even of the standing of *analytic* judgments and *philosophical* judgments as cognitions. Considered per se, in abstraction from the applicability of their concepts to sensible representations, Kant's view seems to be that analytic judgments, too, only allow us to become conscious of relations between *representations* (concepts) themselves and their contents, seeing what is contained 'in' them—rather than making us conscious of their objects. In the analysis expressed in such judgments, Kant claims that our understanding 'is occupied *only* with what is already thought *in* the concepts, and therefore leaves it undetermined whether this *has a relation in itself* [an sich] *to an object*', since 'it is enough to know what lies in its concept' (B314; my ital.).[47] Here,

[46] This *further* non-geometrical, *philosophical* knowledge is possible through the 'deduction' of the objective validity of both the pure intuition of space and the relevant pure concepts (e.g. of quantity) with respect to the experience of real objects (cf. B118f) (Note that Kant also speaks of the Aesthetic as providing an 'explanation' for geometry that 'makes comprehensible' its standing as cognition; cf. B41.)

[47] Cf. Chignell (2014, p. 583n18). Chignell, however, seems to hold that analytic judgments cannot *ever* be viewed as cognitions, and that they can *only* give us cognition (or 'knowledge') of the *contents* of our

then, we reach a case parallel to that of pure geometrical judgments considered per se: just as we are merely conscious of pure *intuition* (again: a representation) and *its* content in geometrical judgment, so too in analytic judgment we are conscious only of *concepts* (representations) and *their* contents—rather than being conscious of *things* which are, or can be (or perhaps cannot be) presented through this content. In neither case can we *yet* be said to be cognizing objects by way of these representations. In both cases, we remain at a stage of 'reflection', again not unlike what we encountered in perception, in which we consider representations, their contents, and their interrelations, 'prior to all *objective* judgments' (B317).[48] To convert our consciousness into an 'objective' one (in this sense), we would need consciousness of the relation between the relevant concepts and some (possible or actual) sensation.[49]

Something similar must be said about philosophical cognition. Despite being even further removed from intuition, insofar as it is rational cognition 'from concepts' *alone*, rather than from construction in pure intuition, the concepts that philosophy deals with *are* such that they 'in some way' *can* be shown to 'correspond' to empirical intuitions and sensations ('impressions'; cf. B74). This is most immediately evident in the Aesthetic, in which the pure *concepts* of space and time undergo an 'exposition' to show that they have an apriori 'origin' in pure *intuition*, intuition whose content universally and necessarily serves as the *form* in which *sensations* will be ordered (cf. B38f, B46f). In the Analytic, the pure concepts of understanding, in turn, are demonstrated apriori to be 'general representations' of the 'pure *synthesis*' of the Aesthetic's manifold of 'pure *intuition*' (cf. B104), to yield the apriori form of possible experience (cf. B265). In fact, even the Dialectic's pure concepts of reason (ideas) are shown to yield a cognition of sorts—albeit one which enjoys only 'objective but indeterminate validity' (B691), insofar as the ideas are demonstrated to be universally and necessarily 'regulative' of our thinking about our empirical cognition (B692-3).[50]

Hence, insofar as philosophy thereby presents and analyzes concepts which represent the apriori (universal, necessary) conditions for having empirical *intuitions*, the apriori conditions for synthesizing these intuitions into individual *experiences* (empirical cognitions), and the apriori conditions for grasping-together experiences

Footnote 47 continued
concepts. This is hard to square with Kant's consistent classification of them as providing apriori cognition (when the above conditions are met).

[48] Here I disagree with Hanna (2001, pp. 93–94), who claims that some analytic propositions, and also mathematical propositions, have a '*primitive* objective validity' on par with empirical cognition. I would classify them instead as apriori judgments whose status as objectively valid is 'secondary', due to their dependence on the further 'deduction' of their validity with respect to specifically empirical cognition.

[49] Kant's discussion of the *falsity* of the (apparently) 'true' analytic proposition <a square circle is round> in *Prolegomena* §52b helps to bring out this further condition on such judgments actually yielding *cognition* of objects (cf. 4:341).

[50] For this reason, the pure cognition from reason that is possible of the objects of its ideas is only specifiable through '*analogy*' with the determinate cognition in experience itself—though it is still accorded the status of 'cognition' (cf. 4:357f). The ideas themselves thereby are demonstrated to relate at least indirectly to consciousness of sensation, by being related directly to the consciousness of the *synthesis* of *experiences* themselves – not to itself constitute another experience, but rather 'to grasp together [zusammenfassen] all the actions of the understanding…into an *absolute whole*' (B383), in order 'to consider *all* cognition of experience as determined through an *absolute totality* of conditions' (B384; my ital.).

themselves ('collectively'; cf. B660) into a '*whole* of the *entire experience* [Ganze der gesamten Erfahrung]' (B378; my ital.), philosophy's concepts do in fact have a demonstrable relation to sensible representations. This, in fact, is exactly what Kant emphasizes in the Doctrine of Method itself about philosophical cognition: it represents a 'synthesis of *possible* intuitions' (B747; my ital.), and more specifically, the possible 'synthesis of *empirical* intuitions' (B750; my ital.), and even more specifically, the 'synthesis of possible *sensations* insofar as they belong to the unity of [consciousness] (in a possible experience)' (B751; my ital.). In this way, philosophy's judgments 'from reason' via concepts 'alone' can likewise be thought of as cognitions indirectly, but only insofar as its representations can be demonstrated to apply, universally and necessarily (if only 'regulatively' rather than 'constitutively'), to experiences built up out of empirical (sensation-involving) intuition. This is so, even if no application to any particular intuition itself occurs in a philosophical judgment itself, and even if no particular sensation is ever named or referred to.

6 Conclusion: from cognition to knowledge

In the preceding I have argued that, for Kant, *cognition* first arises at a distinctive intermediate stage or 'step' in the 'progression [Stufenleiter; step-ladder]' of representations as to the 'levels' of consciousness that they involve. More specifically, I have argued that Kant conceives of cognition as a species of representation which involves four features: it is a representation (i) of a real object, which it represents (ii) mediately, by means of representing other representations, and which involves (iii) 'consciousness [Bewußtsein]' of the real relation between these other mediating representations and their object, a consciousness enabled by (iv) sensations which arise in the mind due to affection by the object in question. Cognition is thus more than mere representation, and also more than mere consciousness of representations. It requires the further consciousness of real (dynamical) relations that obtain between specifically sensible representations and their objects, i.e., a 'recognition' of these objects 'mediately', by means of their representations, in a 'representation *of* a representation' (B93). Cognition need not, however, involve the complete comprehension of its object, or insight into its possibility, or even any consciousness 'from reason' of the (systematic) inferential relations among our cognition.[51]

[51] In future work I will extend this genetic-developmental account to better foreground the precise differences between mere cognition as the activity of the *understanding*, from these higher grades or degrees of cognitive activity (insight, comprehension) as the activity of *reason*, understood as the capacity not for cognition per se but for 'cognition from principles' (B356-7). For now, let me simply note that the pure 'rational cognitions' in mathematics and philosophy might ultimately be better classified, not merely as cognitions, but rather as instances of one of these higher cognitive grades—more specifically: these pure judgments might count for Kant as instances of 'having insight into [einsehen]' or 'comprehending [begreifen]' their objects (cf. B121), insofar as they are either principles themselves (*Grundsätze*) or derived therefrom (as *Lehrsätze*; cf. B760–65). (Recall that it is only in the transition to insight and comprehension that Kant introduces the idea of 'cognition *through reason*', with 'comprehension' in particular involving cognition apriori (cf. 9:64–65).) Let me also note that I have left to the side two still further intermediary grades of cognitive activity, ones which lie beyond experience (empirical cognition) per se, but prior to insight and comprehension: '*empirical thinking* [empirisches Denken]', whose 'principles [Grundsätze]' (viz. 'postulates') are presented subsequently to the analogies of experience (cf. B265), and

I have also sought to bring more sharply to the fore the underlying architectonic significance of the foregoing *progression* itself, as one that, throughout his work, Kant consistently takes to organize the entire domain of our representations, as well as his investigations of this domain. Its very existence has not yet been sufficiently appreciated, nor has the fact that it provides the crucial analytical framework for Kant's discussion of cognition in particular.[52] Perhaps for the same reason, the differences of meaning among various technical terms ('perception', 'experience', 'cognition', 'comprehension', etc.) that Kant uses to track the different stages in the progression have also suffered undue neglect.[53] I hope, therefore, that my analysis will help to draw more attention to Kant's distinctive and technical terminology, and its specific role in his philosophical psychology and philosophy of mind.

In conclusion, let me say a few words about what consequences this genetic-psychological account has for our understanding of the distinction between cognition and '*knowledge* [Wissen]'. The first thing to note is that knowledge itself has no official place at all on the progression we have been charting above, concerning differences in grades or degrees of 'objective content' in our representations (cf. 9:64). Rather, knowledge is instead placed on its own separate and orthogonal progression among the grades or levels of what Kant calls the 'subjective validity' of our representations (B850)—namely, the grades of consciousness of grounds for '*holding-true* [Fürwahrhalten]' judgments about an object. This progression begins with mere 'opinion [Meinen]' about an object (without any sort of sufficient grounds), moves through 'belief [Glauben]' about that object (on the basis of what Kant calls subjectively sufficient though objectively insufficient grounds), before culminating in knowing itself (cf. B848f). Cognition, by contrast, does not require any such 'holding-true' of the relevant judgment, let alone any sufficient grounds for doing so – let alone that the judgment itself in fact *be* true.[54]

The orthogonality of these two progressions mirrors the disjointedness of the two concepts. On the one hand, we could have *cognition* of an object *without knowledge* of it—e.g., if we simply fail to hold-true any of the relevant judgments, or don't have

Footnote 51 continued
'*explanation* [Erklärung]', which Kant characterizes as involving our 'tracing back to laws through which the object can be given in some possible experience' (4:459). In the third *Critique* Kant seems to assign the possibility of explanation to the 'power of judgment [Urteilskraft]' (cf. 5:185, 360), which would also be a good candidate for which capacity is responsible for 'empirical thinking', insofar as the 'Analytic of Principles' as a whole is presented as a 'canon for the power of judgment' (B171).

[52] Its importance did, however, impress itself upon Kant's immediate successors; compare, e.g., the overall progression of 'shapes' of 'consciousness' in Hegel's *Phenomenology* (cf. Förster (2012)).

[53] As noted above, intuition and perception are often conflated; for other examples, see the references in Tolley (2013: §6) and in Tolley (forthcoming-a). Sometimes one or both of these are run together with experience, as in McDowell (1996). The distinction between [d] mere cognition of an object, and [f] having insight or [g] comprehending that object (cognizing 'through reason'), has also been neglected; for a recent criticism of Engstrom (2009) in this regard, see Kain (2010b).

[54] Though, for our discursive understanding, cognizing an object does paradigmatically take the form of *judgment* (cf. Sect. 2 above), this cognition can be *false* (cf. B82-3); even if true, it need not be held-true *at all*, as in 'suspensio judicii' (cf. 9:74f; 24:160f; 24:860)—let alone for *objectively sufficient* grounds, as may happen with respect to merely 'historical cognition' (cf. B846f) or as happens in relation to the cognitions that may be involved in opinion and belief (cf. B848f).

consciousness of sufficient grounds for doing so. In light of the foregoing, this is exactly as it should be, since it allows us to make sense of how Kant could hope to count all of our ordinary *experiences* of objects as cases of (empirical) *cognition*, despite the fact that they do not themselves seem very promising candidates to meet the strict criteria for being cases of *knowing*. On the other hand, it seems as though we could (at least in principle) have *knowledge* of an object *without cognition* of it—e.g., that we could hold-true judgments about an object for both subjectively and objectively sufficient grounds, where none of the grounds come from any representations that either make use of, or can be put into conscious relation to, any sensations. Perhaps this is the case with our 'knowledge' of the *moral law* and the possibility of freedom (cf. 5:4), as we do not seem to have any (theoretical) cognition of it through sensory representations.[55]

Even so, as we noted at the outset, Kant clearly takes there to be a close, positive, and important connection between our having cognition of an object and our being able to have knowledge of that object, such that spelling out the 'Elements' of cognition would be relevant for ultimately accounting for the nature and limits of knowledge itself (cf. Bxxx), and would help answer the overarching question of theoretical (speculative) philosophy: 'what can I *know*?' (B833). On our analysis this also makes sense, since the consciousness *of* a cognition of an object, i.e., the consciousness *that* one has an *experience* of it, *does* provide one with objectively and subjectively sufficient grounds for holding-true certain judgments about that object. In Kant's words, consciousness of having an experience of an object 'proves', or provides 'testimony', that the object itself is really actual or existent (cf. Bxxvi-fn; 5:468). This implies that cognitions themselves can serve as important sources of *grounds* for knowledge (and also, therefore, that not all grounds for knowledge are themselves cases of knowledge). This is, of course, in addition to cognitions being able to furnish some of the *contents* (judgments) which are then held-true in the way required for knowledge.

Nevertheless, as we have seen, something's standing as a cognition on its own does not suffice to count it as a *case* of knowledge. More strongly put: *no* act of mere cognizing can be identical with an act of knowing, since knowledge *always* involves acts (viz. holding-true) which are not a part of the form of cognizing itself. To properly understand Kant's own analysis of cognition, then, we must keep these topics separate, and allow the background framework of psychology and philosophy of mind (representation, consciousness) rather than epistemology (justification, evidence) to provide the most immediate interpretive context for understanding how the core of Kant's masterwork actually proceeds.[56]

[55] We *do* 'relate' to the law through the practical '*feeling*' (hence, sensory representation) of 'respect', though this arises *from* our (pure) *consciousness* of the law (cf. 4:401n; 6:399f), rather than feeling itself being the immediate object of consciousness which we then use to first recognize the law. (For possible neglected connections to intuition in this vicinity, however, see Kain 2010a, p. 224).

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