

ON THE ORIGINAL CONTENT OF KANT'S CATEGORIES:
METAMETAPHYSICS, THE ANALYSIS OF THE
UNDERSTANDING IN THE SYNTHESIS OF EXPERIENCE,
AND THE DISCOVERY OF THE METAPHYSICAL CONCEPTS
OF AN OBJECT IN GENERAL

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Abstract: In the *Critique of Pure Reason*, Kant develops a metametaphysical view concerning the domain and source of a distinctively metaphysical cognition of objects of experience, which is given in terms of an analysis of our representational capacity for thought, namely, the understanding, regarding its sub-capacities and their constitutive abilities and acts. In the Analytic of Concepts, more precisely, in the Metaphysical and Subjective Deductions of the Categories, Kant develops an elaborate account of the content and formation of those metaphysical concepts of an object in general through which there is genuine philosophical cognition of objects of experience, namely, the categories. Relating the Analytic of Concepts to the Doctrine of Method, I give a detailed reconstruction of this account in contrast to both empirical and mathematical concepts. I do so by establishing, for the first time (in English) that and how the representational contents of the categories, as general representations of objects, derive from fundamental abilities and acts of a synthesis of an empirical intuition that the understanding contributes to experiences of objects, which thus yield the original contents of the categories. In particular, I argue that the threefold synthesis of the fundamental act-types of the apprehension, reproduction, and recognition of a manifold of sense-impressions, presented in the A-Deduction, holds the key to understanding the origin of the categories, or concepts of an object in general, investigated in their Metaphysical Deduction. It turns out that the threefold synthesis, as it is exercised regarding a manifold of sense-impressions in an empirical intuition of an object, can indeed account for the representational contents of the categories of Quality (apprehension), Quantity (reproduction), Relation (recognition), and Modality (relating to the object through a manifold of sense-impressions). In this sense, the categories are “concepts of synthesis” (A80/B106) or “concepts of the synthesis of possible sensations” (A723/B751).

Keywords: Metametaphysics, Metaphysical Cognition, Categories, Content, Synthesis of Empirical Intuition, Concept-Formation.

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“For from where will one take the character of the possibility of an object that was thought through a synthetic concept a priori, if not from the synthesis which constitutes the form of the empirical cognition of objects?” (A220/B267)

INTRODUCTION: METAMETAPHYSICS, METAPHYSICAL CONCEPTS, AND KINDS OF COGNITION IN KANT’S *CRITIQUE*

Early in the Doctrine of Method of the *Critique of Pure Reason* (*Critique*) from 1781 (hereafter: A) and 1787 (hereafter: B), Kant characterizes *philosophical cognition* as “the rational cognition from concepts” (A713/B741, A724/B753), where such “rational cognition from mere concepts” (A850/B878), as he says near the end of that chapter, “is in fact nothing but metaphysics” (ibid.)¹. Putting to one side the rational nature of metaphysics, which makes it a “cognition from principles” (A300/B375, A302/B358)², in this essay I focus on its distinctive *kind of concepts* and the distinctive *kind of cognition* they help make possible. What are these concepts through which there is philosophical or metaphysical cognition, and by what right can we take them for cognition? Failure to answer these questions is a mark of “*dogmatism*” (BXXXV), as Kant remarks in the Preface to B:

the presumption to advance, by a pure cognition from concepts (the philosophical [cognition]), according to principles [...], without inquiry into the kind and the right whereby it has gotten there, alone. Dogmatism is thus the dogmatic procedure of pure reason, *without preceding critique of its own capacity*. (BXXXV)

By contrast, a *critical* philosophy or metaphysics involves, besides a systematic, rational cognition from concepts, exactly a preceding inquiry into the very capacity for such cognition. A critical metaphysics accordingly consists of two parts³: *first*, a *metametaphysics* that investigates the *capacity* for metaphysical cognition, and, *second*, a *system* of this *metaphysical cognition* itself⁴, a cognition which Kant further characterizes as *pure* and *a priori*, namely, as independent of any particular or actual experience⁵. As he puts it in the Doctrine of Method, (pure) philosophy is

either *propaedeutic* (preparatory exercise), which investigates the capacity of reason regarding all pure cognition a priori and is called *critique*, or, second, the system of pure reason (science), the whole (both true and apparent)

¹ All translations are mine, having consulted standard editions. I use single quotation marks to denote linguistic expressions, and angle brackets to denote concepts and propositions.

² See also A761/B789, A836-837/B864-865.

³ For a Kant-inspired, contemporary exploration of the notion of a critical metaphysics and its two parts see Johannes Haag, Till Hoepfner, “Denken und Welt – Wege kritischer Metaphysik”, in *Deutsche Zeitschrift für Philosophie* 67/1, 2019, pp. 76–97.

⁴ See also BXXII-XXIII, BXXXVI-XXXVII, A11-14/B24-27, A850/B878.

⁵ See AXII, AXX, BXIV, B28, A845/B873.

philosophical cognition from pure reason in systematic connection and is called *metaphysics* [...]. (A841/B869)⁶

This makes Kant's *Critique* the presentation of his metametaphysics, which investigates the capacity for (theoretical) metaphysical cognition, namely, a "pure cognition a priori" (ibid.) from concepts⁷. Thus, as Kant expressly declares in a letter from 1781, his investigation in that book contains the very "metaphysics of metaphysics" (10:269). In the Doctrine of Method, he also calls this metametaphysics a "*transcendental philosophy*" (A845/B873), which considers "only the *understanding*, and reason, in a system of all concepts and principles that relate to objects in general" (ibid.)⁸. That part of our capacity responsible for *true* – and not merely

⁶ Kant goes on to mention a more inclusive sense of 'metaphysics', in which both the critique and the system belong to metaphysics as understood in contrast to empirical and mathematical reasoning. This is what I called critical metaphysics at the beginning of this paragraph. See also in footnote 8.

⁷ Karin De Boer, *Kant's Reform of Metaphysics. The Critique of Pure Reason Reconsidered*, Cambridge, 2020, pp. 9, 212 also suggests that the *Critique*'s second-order investigation into the possibility of first-order metaphysics is to be understood as metametaphysical (but then attributes transcendental *philosophy* to the first-order investigation, in distinction from transcendental *critique* as the second-order investigation; on this, see the next footnote).

⁸ K. De Boer (*Kant's Reform of Metaphysics*, pp. 12–13, 73–74, 86–87; generally in Ch. 3) and Gabriele Gava (*Kant's Critique of Pure Reason and the Method of Metaphysics*, Cambridge, 2023, pp. 3–5; generally in the Introduction and Ch. 2) read A845/B873, according to which "metaphysics so-called in the narrower understanding consists of transcendental philosophy and the physiology of reason", as a division of the *system* of metaphysics (my *second* part of a critical metaphysics), whereby transcendental philosophy becomes the first part of Kant's metaphysical system. This leads to the problem of how critique and transcendental philosophy relate, since in the *Critique*, Kant indeed treats concepts and principles of objects in general, and, one might add, every (!) main chapter of the book is called a 'transcendental' investigation. But, in fact, I do not think that the text imposes this reading on us. On the contrary: The "metaphysics [...]" in the narrower understanding" in A845/B873 is to be understood as a use of 'metaphysics' in accordance with *its last explicit introduction before that passage*, namely, as the *inclusive* "name also of the whole pure philosophy including the critique" (A841/B869), which is then "divided into the metaphysics of the *speculative* and the *practical* use of pure reason" (ibid.), where "[t]he former contains all rational principles from mere concepts [...]" for the theoretical cognition of all things" (ibid.), which is finally identified precisely as "metaphysics in the narrower understanding" (A842/B870) to be divided in A845/B873 (which is thus *narrow* only as limited to *theoretical* metaphysics, but *inclusive* as consisting of critique and system of such metaphysics). But since a treatment of "all rational principles from mere concepts [...]" for the theoretical cognition of all things" (A841/B869) clearly includes the critique (my *first* part of a critical metaphysics), as such a critique concerns precisely "the principles [!] to a system" (A82/B108), the sense of 'metaphysics' divided in A845/B873 must be the *inclusive* understanding, so that *critique/metametaphysics* is to be identified with *transcendental philosophy* (but at least with its first part, see also *Refl* 4851 18:9), as I have done in the main text, and *the system of metaphysical cognition* with *the physiology of reason* (see also ibid.). The former identification is further confirmed by the fact that transcendental philosophy, just like critique, concerns "the system of the principles [!] of pure reason" (B27). (For this notion of a transcendental philosophy, see also A65-66/B90-91, treated at the beginning of section 1, where the "*analysis of the capacity of the understanding itself*" is accordingly described as "the proper [!] concern of a transcendental philosophy".) Thanks to Christopher Benzenberg for pressing me on this alternative reading.

apparent – (theoretical) metaphysical cognition of objects in general is *the understanding*, whose concepts and judgments are treated in the section called the ‘Transcendental Analytic’. It is here – specifically, in its first half, the Analytic of Concepts – that Kant investigates the concepts through which we can have a rational cognition from concepts which, as he puts it, “relate to objects in general” (ibid.). This investigation makes for a special kind of cognition, or meta-cognition, a so-called *transcendental cognition*, which, as Kant characterizes it in the introduction to A, “is occupied not so much with objects but rather with our concepts a priori of objects in general.” (A11-12) While metaphysical cognition is *of objects in general*, it is preceded by a transcendental cognition *of the concepts* through which such a priori cognition of objects in general is possible⁹.

So, again, what are these concepts through which there is true metaphysical cognition? Having arrived in the Doctrine of Method, Kant possesses a very precise answer to this question:

To consider everything there is (a thing in space or time), if and how far it is a quantum or not, that in it being or lack must be represented, to consider how far this something (which fills space or time) is a substratum, or mere determination, has a relation of its being to something else, as cause or effect, and, finally, stands in isolation or mutual dependence with others in regard to being, the possibility of this being, the actuality, and necessity, or their opposites: all this belongs to the *rational cognition* from concepts, which is called *philosophical*. (A724/B752)

According to Kant, this is everything that we can cognize a priori of objects in space and time by the mere use of concepts, namely, everything that we can cognize of objects of experience in metaphysics. It enumerates nothing other than the so-called *categories*, or pure concepts of the understanding, as they are originally presented in their table at the heart of the Analytic of Concepts¹⁰, and the principles (judgments) of the pure understanding through which they are used in relation to objects of experience¹¹. Philosophical or metaphysical cognition is

⁹ The concept of an object in general is thus the highest of Kant’s transcendental philosophy. See A290-292/ B346-349. See Nicholas F. Stang (“Kant and the Concept of an Object”, in *European Journal of Philosophy* 29, 2021, pp. 299–322; “Thing and Object. Towards an Ecumenical Reading of Kant’s Idealism”, in K. Schafer, N.F. Stang (eds.), *The Sensible and Intelligible Worlds. New Essays on Kant’s Metaphysics and Epistemology*, Oxford, 2022, pp. 296–336) on the multiple dimensions of <object>. I restrict my attention to objects *of cognition* in contrast to mere thought. On the notion of a transcendental cognition, see Houston Smit, “The Role of Reflection in Kant’s *Critique of Pure Reason*”, in *The Pacific Philosophical Quarterly* 80, 1999, pp. 203–223, p. 206; Eckart Förster, *Die 25 Jahre der Philosophie. Eine systematische Rekonstruktion*, 3rd edition, Frankfurt a. M., 2018, pp. 15–17.

¹⁰ See A80/B106.

¹¹ See A136/B175, A148/B187, A161/B200.

hereby understood as *a rational cognition through categories*. Moreover, the categories are precisely the concepts of an object in general¹², representing the most fundamental features of objects of experience¹³. In the final analysis, Kant construes (true) metaphysical cognition as *a rational cognition through concepts of an object in general*, where these concepts represent the quantity (<unity>, <plurality>, <totality>), quality (<reality>, <negation>, <limitation>), relation (<substance-accident>, <cause-effect>, <community>), and modality (<possibility>, <actuality>, <necessity>)¹⁴ of objects that can be given to our senses in space and time.

This requires Kant to have established these categories as the specific domain of metaphysics, in contrast to, say, the concepts used in the cognition we achieve in mathematics, the empirical sciences, or ordinary life. This in turn requires him to identify the specific source of metaphysical concepts accounting for their specific representational contribution to our cognition of objects. Individuating the various *kinds of cognition* just mentioned – metaphysical, mathematical, empirical (scientific or ordinary) – will depend on individuating the attending *kinds of concept* by reference to their sources: *empirical concepts*, both scientific and ordinary, such as <metal>; *mathematical concepts* such as <triangle>; and *metaphysical concepts* such as <substance>. So what is the general source of concepts that contribute to cognition? And what, in particular, is the source of those metaphysical concepts of an object in general through which we can make judgments that constitute (true) metaphysical cognition, namely, the categories? I will develop new and detailed answers to these questions in the course of this essay.

There are four main sections to this essay: In **section 1**, I introduce some notions and distinctions fundamental to Kant's analysis of the understanding as the capacity for a cognition through concepts. In **section 2**, I outline Kant's analysis of the capacity of the understanding as it contributes to experiences of objects in the synthesis of empirical intuitions. In **section 3**, I go on to sketch Kant's general account of concept-formation and to identify the sources of empirical, mathematical, and metaphysical concepts in various fundamental aspects of the synthesis of empirical intuitions. Sections 2 and 3 are primarily sketches preparing the ground for the final section, **section 4**, where I conclude with a reconstruction of Kant's account of the formation of empirical (ordinary, scientific) and mathematical concepts, culminating in his formation of the categories – as those concepts through which there can be metaphysical cognition of objects of experience – from the fundamental abilities and acts that the understanding contributes to experiences of objects in the synthesis of empirical intuitions, which realizes the main aim of this essay.

¹² See A93/B125-126, B128-129, A290/B346.

¹³ See A93/B126, A111.

¹⁴ And their opposites: <impossibility>, <non-being>, <contingency>.

1. KANT'S ANALYSIS OF THE CAPACITY OF THE UNDERSTANDING REGARDING ITS FUNDAMENTAL ABILITIES, ACTS, AND CONTENTS OF REPRESENTATION: THE TASK OF EXPLAINING THE A PRIORI, SUBJECTIVE ORIGIN OF THE CATEGORIES IN THEIR METAPHYSICAL AND SUBJECTIVE DEDUCTIONS

The name of a 'Transcendental Analytic' indicates that the method of Kant's transcendental philosophy in this part of the *Critique* is one of philosophical analysis, where this analysis is directed at the capacity of the understanding¹⁵. And indeed, after contrasting it with an analysis of concepts, "or the usual procedure in philosophical investigations, to analyze concepts [...] as to their contents and render them distinct" (A65/B90), Kant introduces the Analytic of Concepts as

the yet little tried *analysis* [*Zergliederung*] of the capacity of the understanding itself, to research the possibility of concepts a priori by seeking them in the understanding alone, as their birthplace, and analyze [*analysieren*] its pure use in general; since this is the proper concern of a transcendental philosophy; the rest is the logical treatment of concepts in philosophy in general. (A65-66/B90-91)

Once there is a *transcendental* analysis of the understanding that accounts for the possibility of the concepts fundamental to philosophical cognition, as it is given in the *Critique*, there is also a place for the subsequent *logical* analysis of concepts aiming at a *system* of philosophical or metaphysical cognition, beginning with the derivation of "*predicables* of the pure understanding" (A82/B108)¹⁶ by introducing specific differences as, say, the pure concepts <power> or <act> can be derived from the category <causation>¹⁷. This derivation is where the second part of a critical metaphysics begins, which forms a system of metaphysical cognition proper.

The preceding Analytic of Concepts, by contrast, belongs to the first and metametaphysical part of a critical metaphysics and forms *the analysis of a capacity*, more precisely, the capacity of the understanding. The aim of this analysis, as Kant puts it in the introductory passage above, is to establish *the possibility of concepts a priori*, more precisely, the possibility of the *elementary* pure concepts of the understanding, or categories. Establishing this possibility requires carrying out *two tasks* regarding the categories, which Kant describes as, *first*, "seeking them in the

¹⁵ See AXII, BXXXV-XXXVII, B27, A64/B89, A247/B303; and H. Smit, "The Role of Reflection in Kant's *Critique of Pure Reason*", pp. 209–210, 218–219. The understanding that is the subject-matter of this analysis is not already *represented* in its ordinary use (say, regarding its logical form), as Smit (also pp. 210–211, 215) suggests. It is *exercised* in this use, but not cognized. A "discovery [!] of all pure concepts of the understanding" (A66/B91), say, can only be achieved in (transcendental) philosophy. See also the final paragraphs of section 4.

¹⁶ See also AXXI, A11-14/B24-27.

¹⁷ See A82/B108.

understanding alone, as their birthplace" (A66/B90), and as, *second*, analysis of "its pure use" (ibid.) of the categories in relation to objects of experience¹⁸. If metaphysics is to have its specific domain of cognition, the specific source or origin of its concepts must be the capacity for cognition and its exercise alone, independent of whatever is or can be given to the senses. Our capacity and exercise of the understanding alone is the source of (true) metaphysical cognition. This idea lies at the heart of Kant's revolution in metaphysics¹⁹: to metaphysically cognize *the most fundamental features of objects* we must transcendently meta-cognize *the most fundamental abilities and acts of that capacity through which we experience and judge objects*²⁰. The *Critique* is thus a form of "self-cognition" (AXI) of our rational capacity, as Kant puts it in the Preface to A²¹.

The above two tasks correspond to the two main parts of the Analytic of Concepts, namely, the "Transcendental Guiding Thread to the Discovery of all Pure Concepts of the Understanding" (A67/B92) (hereafter: Guiding Thread), which contains the Metaphysical Deduction of the Categories (hereafter: Metaphysical Deduction)²², and the subsequent Transcendental Deduction of the Categories (hereafter: Transcendental Deduction). To account for the possibility of the categories, Kant must show both that they are *a priori*, namely, originate in the understanding alone, which is the task of the Metaphysical Deduction²³; and that they are *objectively valid*, namely, can be used – purportedly and successfully – in relation to objects of experience, which is the task of the Transcendental Deduction²⁴.

According to the A-Preface, this latter argument possesses not only an *objective side*, where "the objective validity of its concepts a priori is to be set

¹⁸ See also A62/B87, A85/B117.

¹⁹ See BXIV-XIX.

²⁰ See A89-90/B122, A 111, B161, A158/B197; and H. Smit, "The Role of Reflection in Kant's *Critique of Pure Reason*", pp. 206, 209; Houston Smit, "Kant on the Apriority and Discursivity of Philosophy", in S. Bacin *et al.* (eds.), *Kant and Philosophy in a Cosmopolitan Sense: Proceedings of the XI. Kant-Congress 2010*, Berlin/Boston, 2013, pp. 739–750, p. 741; K. De Boer, *Kant's Reform of Metaphysics*, p. 212 (see in footnote 7).

²¹ See also A735/B763.

²² See B159.

²³ See A64/B89, A79-80/B105-106, B159, *Progress* 20:318; and Béatrice Longuenesse, *Kant and the Capacity to Judge. Sensibility and Discursivity in the Transcendental Analytic of the Critique of Pure Reason*, Princeton, 1998, p. 4, n. 3; Béatrice Longuenesse, "The Divisions of the Transcendental Logic and the Leading Thread", in G. Mohr, M. Willaschek (eds.), *Immanuel Kant: Kritik der reinen Vernunft* (Klassiker Auslegen), 2nd edition, Berlin, 2024, pp. 103–125, p. 104; Nicholas F. Stang, "Kant on the Metaphysical Deduction of the Categories", in A. Stephenson, A. Gomes (eds.), *The Oxford Handbook of Kant*, Oxford, 2024, pp. 130–152, pp. 130–131.

²⁴ See A85/B117, A89-92/B122-124, B159. For this way of distinguishing the Metaphysical and Transcendental Deductions, see Till Hoepfner, *Urteil und Anschauung. Kants metaphysische Deduktion der Kategorien*, Berlin/Boston, 2021, chapter 1.1.3; Till Hoepfner, "Kant's Metaphysical and Transcendental Deductions of the Categories: Tasks, Steps, and Claims of Identity", in G. Motta, D. Schulting, U. Thiel (eds.): *Kant's Transcendental Deduction and his Theory of Apperception. New Interpretations*, Berlin/Boston, 2022, pp. 461–492.

forth” (AXVI), but also a *subjective side*, which concerns “the pure understanding itself, in its possibility and with the powers of cognition on which it itself rests” (ibid.), namely, how minded subjects, through fundamental abilities and acts of representation, even so much as *purport* to represent objects of experience through the categories (Subjective Deduction). Whereas the Metaphysical and Subjective Deductions aim at establishing that the categories are a priori and “*subjective conditions of thought*” (A89/B122), the Transcendental (Objective) Deduction aims at explaining “how [these] *subjective conditions of thought* should have *objective validity*”, namely, *successfully* represent objects of experience²⁵.

The *apriority* of the categories is to be understood, more precisely, as their contents’ subjective source in the capacity of the understanding, as contrasted with, say, ordinary empirical concepts, whose representational contents originate in experiences of objects from which we derive them by abstraction²⁶. To establish such apriority, it is not enough to show negatively that the categories are no empirical concepts. One must further positively trace their origin back to *the capacity of the understanding itself*, more precisely, to *fundamental representational abilities and acts* of minded subjects. The categories are supposed to be of a *a priori, subjective origin*. To show that they are is tackled in their Metaphysical and Subjective Deductions given in terms of a *synthesis of empirical intuition* introduced in the Guiding Thread but elaborated only in the A-Deduction.

This makes the Analytic of Concepts, where the relevant concepts are precisely the categories, essential to a proper understanding of Kant’s metametaphysics and analysis of the understanding: Here he establishes the specific domain of metaphysics by identifying the specific source of its fundamental concepts, the categories, through an analysis of our very capacity for metaphysical cognition – the understanding – regarding its fundamental abilities and acts, in particular as exercised in a synthesis of empirical intuitions. It will prove particularly fruitful to relate Kant’s treatment of the categories, as given in the Analytic of Concepts, to the Doctrine of Method of the *Critique*, more specifically, the Discipline of Pure Reason in Dogmatic Use, where he relates them to empirical (both ordinary and scientific) and mathematical concepts.

As noted in the Introduction, the main representational capacity at the center of both Kant’s Transcendental Analytic and this essay is *the understanding*. Its most general notion is arguably that of a capacity for a “cognition through concepts” (A68/B93, A69/B94; *Discovery* 8:217n.), of which the *metaphysical* cognition from concepts – namely, from *categories* – is a particular kind. To first approximation, Kant understands *cognition of objects* as a representational relation of individual minded subjects to particular objects distinct and independent from these subjects and their

²⁵ For this way of understanding the tasks of the Transcendental Deduction and its two main steps, see T. Hoepfner “Kant’s Metaphysical and Transcendental Deductions of the Categories”.

²⁶ See sections 3, 4.

particular representational acts or states (hereafter: objects)²⁷. Its fully articulated form consists in *judgments* which aim at truth, namely, those cognitive acts by which concepts, understood as general representations of features or kinds of objects²⁸, are related to objects and true or false (hereafter: true/false) of them²⁹. Judgments are thus the proper cognitions through concepts.

The understanding consists of a number of sub-capacities, namely, the capacities to judge, to form concepts, and – in the guise of the imagination³⁰ – to have sensible intuitions. Each of these, namely, both the main capacity and each of its sub-capacities, possess a specific task that helps individuate them as the capacities they are. Thus, a *capacity* can be individuated by two things:

- (1) by what it is a capacity for, namely, its specific *task*; and
- (2) both by *the abilities* that constitute it and *the corresponding acts* whose exercise is required to realize its task.

The constitutive features of *representational* capacities and their exercises are to be considered as representational abilities and acts, respectively. These abilities and acts are the individually necessary and jointly sufficient conditions of realizing the representational task that individuates a given representational capacity.

It turns out that, according to Kant, for each specific representational capacity there are various fundamental abilities that together constitute it. To illustrate, this is the result of Kant's analysis in the case of *judgment*, which I will not specially reconstruct in this essay:³¹ The specific representational capacity for judgment is constituted of the fundamental abilities to employ

- i*) a *predicate-concept* (e.g., <divisibility> in <bodies are divisible>),
- ii*) a *subject-representation* (e.g., <body> in <bodies are divisible>), and
- iii*) a *predication* or *combination* (e.g., the copula <being> in <bodies are divisible>).

These abilities (or acts) are necessary conditions of realizing the representational task that individuates judgment. Any such specific structure will have to be based on what is required to constitute a specific representational capacity with a specific

²⁷ See B137, B158, *Letters* 11:515. For this notion of cognition and the corresponding notion of its object, see H. Smit, "The Role of Reflection in Kant's *Critique of Pure Reason*", p. 205; Houston Smit, "Kant on Marks and the Immediacy of Intuition", in *The Philosophical Review* 109, 2000, pp. 235–266 (pp. 240–242, 245–246).

²⁸ See section 3.

²⁹ See A68-69/B93-94, B141-142.

³⁰ See A79/B104-105, B162n.; and Wilfrid Sellars, *Science and Metaphysics. Variations on Kantian Themes*, Ridgeview, 1967, chapter I §10.

³¹ See A68-96/B93-94. The following four constitutive abilities and acts in judgment – *i*) through *iv*) – correspond to the four headings of the table of logical functions in A70/B95 (Quantity, Quality, Relation, Modality). See T. Hoepfner, *Urteil und Anschauung*, chapter 2; Till Hoepfner, "Kant's Metaphysical and Transcendental Deductions of the Categories", section 1.1; Till Hoepfner, "Kantian Thoughts. Towards an Alternative to Russellian and Fregean Propositions", in *Kant Yearbook* 15/1, 2023, pp. 77–107, section 4.

representational task, which task, in the case of a judgment that is a cognition through concepts, is to relate concepts to objects in a way that is truth-apt.

Moreover, for each specific representational capacity, these abilities that constitute it are each only necessary for the capacity's exercise but not yet jointly sufficient; in addition, for each such capacity a final condition is required, which is the condition (or domain) for the exercise of the other abilities *as acts* of representation. To again illustrate for the case of judgment: Required as the final condition for the exercise of the other abilities as acts of representation are (at least possible)

iv) sensible intuitions of objects (e.g., empirical intuitions of <this body>).

It is only this condition (or domain) of exercise which, together with the exercise of the other abilities, suffices to constitute the capacity's exercise and thereby realize its task through representational acts, say, a judgment consisting of the various partial acts *i*) through *iv*), which together relate concepts *to objects* in a way that is truth-apt. These acts are actualizations of the abilities that are constitutive of the capacity, whose actualizations through acts are in turn constitutive of its exercise. It is then this condition – say, sensible intuitions of objects – which in turn is analyzed into its own various fundamental abilities – here: of a synthesis of intuition – along with its own condition (or domain) of exercise – here: a receptivity towards sense-impressions –, and so on, until finally the task of the general capacity that contains the others is accounted for (more on these abilities and acts of synthesis in section 2).

Kant's basic distinction in thinking about representations is that between *acts*, *contents*, and *objects* of representation or cognition, where

– *acts of representation* are *particular representings* (here and now) exercised by individual minded subjects (e.g., my particular judging that bodies are divisible, or my particular intuiting of this body);

– *contents of representation* are *correct or incorrect representational relations* that these acts have to their objects, individuating abstract *kinds of acts* (e.g., the propositional content <all bodies are divisible>, or the singular perceptual content <this body>); and, finally,

– *objects of representation* are what is represented by contentful acts and *what makes such acts correct or incorrect* (e.g., the fact that bodies are divisible or not, or that something is a body or not)³².

This distinction emerges most clearly in passages introducing the Transcendental Analytic, where Kant distinguishes from the act and the object of representation, additionally, the representational content of the act characterized as its representational relation to the object:

³² See W. Sellars, *Science and Metaphysics*, chapters II §3, III §§1-2; Clinton Tolley, "Kant on the Content of Cognition", in *European Journal of Philosophy* 22:2, 2011, pp. 200–228; T. Hoepfner, "Kantian Thoughts", sections 3, 4.

content of cognition, i.e., [...] its relation to the object (A55/B79);
 content of cognition (relation to its object) (A58/B83);
 [cognition's] content [...], i.e., [...] relation to some object [...]. (A62–63/B87)

To understand the capacity and exercise of a representational capacity, it is central to account for representational content. One way to see why this level is required, next to acts and objects of representation, is to recognize that acts of representation can be correct *or incorrect* in relation to their objects, and still must be acts *of a certain kind*. Consider how Kant describes false judgments:

a cognition is false if it does not agree with the object it is related to, although it does contain something [=its content] that could well hold of other objects. (A58/B83)

If truth consists in “the agreement of the cognition with its object” (A58/B82), what makes a judgment false is that it does not agree with its object, where, since there is no such object, what makes the act the kind of act it is, and what does not so agree, is the act's *content*.

The most important kinds of content for Kant are propositional, singular, and conceptual content³³. All these kinds of content, according to Kant, are to be explained by reference to one main representational capacity and its various sub-capacities, the understanding. It is the general capacity whose task is to cognize through concepts, namely, to form concepts and use them in relation to objects. This requires the exercise of its specific sub-capacities. Their specific tasks are:

- a) to make judgments: to exercise acts with propositional contents* (e.g., <bodies are divisible>), namely, to relate concepts to objects in judgments, i.e., in a way that is truth-apt;³⁴
- b) to have sensible intuitions of objects: to exercise acts with singular (perceptual) contents* (e.g., <this body>), namely, to have singular representations of particular objects and their particular features;³⁵
- c) to form concepts of objects: to exercise (analyzing, abstractive) acts leading to general contents* (e.g., <body>), namely, to form general representations of kinds or features of objects³⁶.

The exercises of these capacities, which are *required of any individual minded subject able to cognize through concepts*, are interrelated: A minded subject must realize tasks *b)* and *c)*, namely, have or have had intuitions and form or have formed concepts, to be able to realize task *a)*, namely, make judgments. (This asymmetrical dependency concerns the *exercise* of these capacities; taken as

³³ See W. Sellars, *Science and Metaphysics*, chapter III §1.

³⁴ See footnote 31.

³⁵ See section 2.

³⁶ See A76-78/B102-104, *Log* 9:94-95, *Refl* 2854-83 16:547-558, 20:211n.; and T. Hoepfner, *Urteil und Anschauung*, chapter 2.2.

capacities, to have one of them is to have all of them.) In this essay I will focus on **b)** and **c)**, in particular on the formation of the *categories* on the basis of the synthesis of an empirical intuition.

The categories as specifically metaphysical concepts come into play here because, according to Kant, the capacities to judge, form concepts, and have intuitions each possess specific *pure (non-empirical) representations* as their respective principles of operation, which, while *their representation* is not required of any minded subject to be able to cognize through concepts, must be represented and explained in a complete *philosophical analysis* of the possibility of possessing and exercising the understanding through judgment, sensible intuition, and concept-formation. These are:

- d)* The pure concepts of the understanding or *categories* (<unity> etc.), which are the pure concepts of an object in general, are the (constitutive) principles of judgment, whose applicability is presupposed for the exercise of the corresponding acts of (determinative) judgment³⁷. As I will elaborate in detail below, the representational contents of the categories are explained in terms of the abilities and acts of a synthesis of a manifold of *sense-impressions* into *empirical* intuitions (i.e., **b)**)³⁸.
- e)* The pure intuitions of *space and time* are the principles or forms of sensibility wherein alone objects of sensible intuition and their features can be given to us³⁹. (The representational characteristics of space and time – including their infinite variety, homogeneity, and unity, which are fundamental to the Metaphysical Expositions of <space> and <time> in the Transcendental Aesthetic – are explained in terms of the abilities and acts of a synthesis of a *pure* manifold into *pure* intuitions⁴⁰.)
- f)* Another capacity, namely, reason, contributes pure concepts of the whole of nature, namely, *ideas of reason* – <homogeneity>, <specification>, and <continuity> – which are the (regulative) principles of concept-formation, whose applicability is presupposed for the exercise of the corresponding (reflective) acts of concept-formation and the formation of a system of concepts⁴¹.

Each of these sub-capacities in turn consists of specific representational abilities and acts that are individually necessary and jointly sufficient to realize their

³⁷ See B128, B143, A245–246; and T. Hoepfner, *Urteil und Anschauung. Kants metaphysische Deduktion der Kategorien*, chapters 2 and 3; “Kant’s Metaphysical and Transcendental Deductions of the Categories”, sections 2.1–2.3; “Kantian Thoughts”, section 4. The role of the categories as principles of judgment is beyond the scope of this essay.

³⁸ See A21-22/B35-36. See sections 2-4.

³⁹ See section 2.

⁴⁰ See A23-25/B38-40, A30-32/B46-48, A99-100, A101-102, A103, B160-161. For first steps in this direction, see T. Hoepfner, “Kant’s Metaphysical and Transcendental Deductions of the Categories”, section 3.3. This, too, is beyond the scope of this essay.

⁴¹ See A653/B682-A668/B696. This is a topic for future work.

respective tasks, and exhibits the structure of various abilities and acts plus final condition (domain) of exercise introduced above.

Here is an overview of the specific representational capacities relevant to the themes discussed in this essay (Figure 1):

Capacity	Task	Abilities/Acts (<i>i</i> to <i>iii</i>)	Condition (<i>iv</i>)
a) Judgment	Truth-apt judgments about objects (=acts with propositional contents)	<i>i</i>) logical predicate (Quantity) <i>ii</i>) logical subject (Quality) <i>iii</i>) predication or combination (Relation)	<i>iv</i>) sensible intuitions of objects (Modality)
b) Synthesis of empirical intuition	Singular representations of individual objects and their features (=acts with singular perceptual contents)	<i>i</i>) apprehension <i>ii</i>) reproduction <i>iii</i>) recognition	<i>iv</i>) the empirical manifold of sense-impressions
c) Concept-formation	General representations of features or kinds of objects (=acts with general contents)	<i>i</i>) comparison <i>ii</i>) reflection <i>iii</i>) abstraction	<i>iv</i>) sensible intuitions of objects
d) Categories	Principles of (determinative) judgment, their contents based on the synthesis of empirical intuition (b)	<i>i</i>) Quantity (<unity> etc.) <i>ii</i>) Quality (<reality> etc.) <i>iii</i>) Relation (<substance-accident> etc.)	<i>iv</i>) Modality (<possibility> etc.)
e) Synthesis of pure intuition	Space and time as forms of intuition/formal intuitions	<i>i</i>) apprehension (variety) <i>ii</i>) reproduction (homogeneity) <i>iii</i>) recognition (unity)	<i>iv</i>) the pure manifold of spatial/temporal positions and relations
f) Ideas of reason	Principles of (reflective) concept-formation	<i>i</i>) homogeneity <i>ii</i>) specification <i>iii</i>) continuity	<i>iv</i>) nature as object of the senses

Figure 1: Representational capacities, their tasks, fundamental abilities and acts of representation, plus condition of exercise.

For reasons of space, I will focus on **b**), **c**) and **d**) in this essay. My main aim will be to explain the representational content of the categories, namely **d**), with reference to **b**) and **c**).

2. KANT'S ANALYSIS OF THE UNDERSTANDING IN THE EXPERIENCE OF OBJECTS: SENSE-IMPRESSIONS, PURE INTUITION, AND THE SYNTHESIS OF AN EMPIRICAL INTUITION

Kant's Metaphysical and Subjective Deductions concern the source or origin of the categories as those concepts through which we purport to have philosophical cognition of objects in general, which origin is supposed to lie solely in our capacity for thought or the understanding⁴². The categories originate in the capacity for thought and not in the senses. Kant calls such a "distinction of the kind of cognition to which they [representations] belong" (A262 /B318) a "transcendental consideration (reflexio)" (ibid.): "The first question preceding all further treatment of our representations is this: in which capacity for cognition do they belong together?" (A260/B316) The distinction between the capacities of *understanding* and *sensibility*, on which this question of a transcendental reflection is based, is that between two fundamental ways for a mind to relate to representations of objects⁴³. One is "to produce representations by oneself" (A51/B75) through spontaneity or *the understanding*; the other is "to receive representations" (ibid.) through receptivity or *the senses*. In this way, Kant distinguishes *what is and what is not due to the exercise of representational acts* in our cognition of objects. In the B-Deduction, he puts this distinction in terms of *the act of combination of representations* and *the representations given by objects*:

among all representations, combination is the only one which cannot be given by objects but only be performed by the subject itself, because it is an actus of its own activity. (B130)⁴⁴

The representations given by objects require the capacity to receive them through the influence of objects on our senses, or sensibility, while combination requires the capacity to perform it by oneself, or the understanding.

Kant's procedure of a transcendental reflection comes out most clearly in his *method of isolation* as directed at components in experiences of objects or empirical intuitions⁴⁵. In the Transcendental Aesthetic, he starts from the experience of a body and goes on to isolate three main components as they occur in such an empirical intuition:

⁴² The remaining sections of this essay sketch the reading of the representational content of the categories that I have elaborated comprehensively and in detail in T. Hoepfner, *Urteil und Anschauung*, chapters 1 and 3.

⁴³ A shorter version of the current section will also appear in a forthcoming article on "Kantian Experience and Concept-Formation".

⁴⁴ See also *Progress* 20:275-276, *Letters* 11:376; and H. Smit, "The Role of Reflection in Kant's *Critique of Pure Reason*", p. 218.

⁴⁵ See A22/B36, A62/B87; and H. Smit, "The Role of Reflection in Kant's *Critique of Pure Reason*", pp. 216–219.

[I]f I separate [absondern] from the representation of a body what the understanding thinks of it, as substance, power, divisibility etc., [and] in the same way what of it belongs to sensation, as impenetrability, solidity, color etc., something remains for me from this empirical intuition, namely, extension and shape. (A20-21/B35)⁴⁶

The first component of an empirical intuition is *what the understanding thinks* of its object, for instance, that it is a substance. This corresponds to what above was described as the act of combining representations, as opposed to the representations given by objects. These *representations given by objects*, however, and this is the second component of an empirical intuition, are sensations or sense-impressions through which sensible qualities such as color, weight, solidity, sound etc.⁴⁷ are given to us as “the effect of an object on the capacity to represent” (A19/B34). They are the basis for the representation of perceivable features through an empirical intuition that “relates to the object through sensation” (A20/B34). When objects influence our senses, they produce in us a manifold of sense-impressions based on which we represent their perceivable features through empirical intuitions.

Sense-impressions of sensible qualities as given to us by objects are what *sensibility*, considered in isolation, contributes to experiences of objects independently of the understanding. Moreover, and this is the third component of an empirical intuition, such givenness of sense-impressions involves a *way* in which they are given to us⁴⁸. This way of givenness is “that wherein alone the sensations order themselves and can be positioned in a certain form” (A20/B34). Such a “pure form of sensibility” (ibid.) is at the same time a system of manifold relations wherein objects of empirical intuitions and their perceivable features occupy singular positions. It is through such a system that individual objects have “their position in the intuition, wherein the objects can alone be given” (A271/B327). The specific form of our senses consists of space and time, a system of manifold spatial and temporal positions wherein objects of the senses and their perceivable features can exist successively or simultaneously in time and co-exist in space⁴⁹. By virtue of the positions an object of empirical intuition and its perceivable features occupy within this system, it exhibits a particular “extension and shape” (A21/B35). For instance, the existence of a body extends over time, while the relations of its perceivable features form a particular spatial shape⁵⁰. Such formal features are represented by that aspect of an empirical intuition which Kant calls the “*pure intuition*” (A20/B34-35) of an object.

⁴⁶ See also B5-6.

⁴⁷ See also *Progress* 20:268-269.

⁴⁸ See B129, B144-145.

⁴⁹ See A30/B46, A23/B38.

⁵⁰ See B66.

Categories, by contrast, are what *the understanding*, considered in isolation⁵¹, contributes to experiences of objects independently of sensibility. This was the first component of an empirical intuition in the Aesthetic passage, corresponding to the act of combining representations. Now that we have arrived in the Transcendental Analytic, “we lift out merely that part of thinking from our cognition which has its origin only in the understanding” (A62/B87), or the categories. While the aim of abstraction in the Aesthetic passage was to isolate the pure intuition of a body as representing its extension and shape, Kant describes a parallel abstraction at the beginning of his *Orientalion* essay from 1786, aimed at isolating the categories:

If we [...] leave out from this concrete act of the understanding [an empirical intuition] the addition of the image, first [the addition] of the contingent perception through the senses, then even the pure sensible intuition in general: thus that pure concept of the understanding remains [...] [which] contains a rule of thinking in general. (8:133)⁵²

Here, again starting from an empirical intuition, the same three components are distinguished as in the Aesthetic, this time leaving out the contributions of sensibility and attending to that of the understanding, namely, the pure concept(s) of the understanding. More precisely, attended to are *fundamental abilities and acts* of the understanding *as exercised in experience*. As Kant is recorded to have said in a lecture on metaphysics in 1784/5, there are

concepts of the understanding through reflections of our understanding that we require if we achieve an experience, so that we separate [absondern] these reflections and in that separation take on their own. To this end [...] [we] only need to isolate the actus of our understanding. (V-MP/Volckmann 28:372)

There are fundamental acts (‘reflections’, ‘actus’) through which we contribute to achieving experiences of objects and on which the categories are based. According to Kant, we can direct our philosophical attention to these acts alone as they are expressed in experiences of objects and isolate them. The categories, then, are supposed to be discovered in a philosophical reflection on the understanding as it is involved and expresses itself in experiences of objects. In this way, Kant attempts to do justice to the fact that experiences *of objects* involve more than just representations of their perceivable features and formal relations. For instance, the empirical intuition of a body exhibits a particular *unity* different from and more than the representations of its perceivable and formal features: rather, in experiences of bodies, their features occur as *combined*. This unity of the experience of an object can be seen as expressing an act of the understanding that represents, say, a common bearer of these various features, or a substance. It would then be the exercise of this act of combination that explains this unity.

⁵¹ See A62/B87.

⁵² See also B5-6, A253-254/B309.

Kant attends to and identifies the categories in a *philosophical* or *transcendental reflection on experience*, namely, in a reflection on the various aspects that characterize our empirical intuitions of objects. This philosophical reflection is thus directed at *the abilities and acts of the understanding as they are involved and expressed in experiences of objects*⁵³. These are characteristics of our experience which, according to Kant, cannot be traced back to the senses, but are rather to be explained by recourse to representational abilities and their exercise through acts of the understanding in experience, such as, say, its representation of the unity of the various features of an object.

The categories are exercised “on the occasion of experience” (A66/B91), as he continues the passage from the introduction to the Analytic of Concepts treated in section 1 above, where he described the chapter as giving an analysis of *the understanding itself*⁵⁴. Kant, it turns out, analyzes the understanding itself as involved and expressed in our experience of objects, thereby “tracing the pure concepts to their first germs and predispositions in the human understanding” (ibid.), namely, to the capacity’s fundamental abilities and acts of representation in experience. Categories are thus formed *on the occasion of experience* but *not from it*, as empirical concepts are (more on this in sections 3 and 4)⁵⁵. Categories are *not derivatively* but *originally acquired* representations of objects, namely, concepts whose contents are produced independently of specific other representations of objects solely by virtue of having and exercising a capacity for objective representation. As Kant remarks in the *Discovery*, the understanding does not take “the synthetic unity of the manifold in concepts [...] from the objects, as given in them in themselves [...], but brings [it] about a priori from itself”⁵⁶ (8:221). How exactly the understanding does this is the topic of the remainder of this section (and will be the basis for Kant’s formation of the categories treated in sections 3 and 4).

To summarize the results of Kant’s method of isolation, the following three aspects can be distinguished in experiences of objects concerning what the understanding and sensibility, each considered in isolation, contribute to an empirical intuition, while in each case there is both an analysandum with which the analysis begins and an analysans with which it ends.

The contribution of the understanding to empirical intuition:

- (1) the representation of the unity of objects through empirical intuitions (analysandum), and the act of combination/the categories (analysans);

⁵³ For more on this, see section 4, including footnote 94.

⁵⁴ See also *Log-Phil* 24:452, *V-MP-L1/Pölitz* 28:233.

⁵⁵ See A8/B12, A23/B38, A30/B46.

⁵⁶ See also 221f., 222f.

The contributions of sensibility to empirical intuition:

- (2) the representation of perceivable features of objects through empirical intuitions (analysandum), and the ability to receive sense-impressions as given by objects (analysans);
- (3) the representation of extension and shape/spatial and temporal relations of objects and their perceivable features through empirical intuitions (analysandum), and the pure intuition of extension and shape/spatial and temporal relations (analysans).

These three aspects come together through the interaction of sensibility and understanding in actual experiences of objects, of which the respective contributions of sensibility and understanding are philosophical abstractions.

In the remainder of this section, I take a closer look at (1), namely, at how Kant analyzes the unity of an empirical intuition in terms of an act of combination. It will turn out that this act and unity also involve (2) and (3).

So how exactly are we to understand the unity and combination in an empirical intuition? This “unity of intuition” (B144n.), Kant notes in the B-Deduction, is that “through which an object is given, which always involves a synthesis of the manifold given to an intuition” (ibid.). Or, equivalently, as he puts it in the A-Deduction: it is “that unity [...] which must be encountered in a manifold of cognition in so far as it stands in a relation to an object” (A109). The unity of intuition is that through which an intuition first of all *gives an object* to the mind, or, equivalently, that through which the mind first of all *relates to an object*, which is precisely what makes it a *representation of an object*, where there is a combination among the various aspects of the representation such that they represent the qualitative and formal features of one and the same the object.

This implies that the contributions by sensibility, namely, manifolds of both sense-impressions (2) and pure intuition (3), cannot be considered components of an empirical intuition of an object independently of the unity produced by the understanding. Sense-impressions only represent the perceivable features of an object *within the unity of an empirical intuition*, since only by virtue of this unity do they even belong to the representation of an object. Considered by itself, a sensation is nothing but a representation “that only relates to the subject as the modification of its state” (A320/B376), and not to an object and its qualities. “[S]ensations of colors, sounds, and heat” (B44) are such that “because they are only sensations and no intuitions by itself they do not allow for the cognition of an object” (ibid.)⁵⁷. Only if it involves an act of combination by the understanding, does a representation exhibit the unity that makes it about an object and thus more

⁵⁷ See also *Progress* 20:268-269, *Notes* (A20) 23:21, *Refl* 1902 16:153; and H. Smit, “Kant on Marks and the Immediacy of Intuition”, pp. 240–241.

than just a state of the representing subject, for instance, a mere color-sensation. Only through the act of combination do we purport to represent, for instance, an object as having a particular color. This holds also for pure intuitions of extension and shape: these too can be represented as features of objects only if they are related to objects *within the unity of an empirical intuition*, since they too belong to the representation of an object only by virtue of this unity⁵⁸. Both sense-impressions and pure intuition, as considered by themselves, indeed go back to sensibility. But they represent the qualitative and formal features of an object only within the unity of an empirical intuition, namely, through the combination by the understanding.

Since a cognition's relation to its object is its representational content (see in section 1), accounting for the unity of intuition through an act of combination at the same time accounts for the original content of our representations by virtue of which they relate to objects in the first place. In the Metaphysical Deduction, Kant accordingly introduces his account of a *synthesis of intuition* as an attempt to explain representational contents, stating that "the synthesis alone is that which properly collects the elements for cognitions and unifies them to a certain content" (A77-78/B103). Equivalently, in the A-Deduction he motivates his view of a synthesis of intuition by the need to explain how our mind can "relate to objects" (A97). So, what exactly is this combination through which our representations have a content and relate to objects?

As already indicated in section 1, Kant's account of a synthesis of empirical intuition takes the form of an analysis of the act of combination into fundamental *constitutive abilities and acts of representation* that are *individually necessary and jointly sufficient for achieving the unity of empirical intuition* and thereby representational content. In the Metaphysical Deduction, Kant only alludes to three acts of synthesis of a manifold (pure or empirical) by saying that "the spontaneity of our thought requires that this manifold be first gone through, taken up, and combined, to make it a cognition" (A77/B102). But he gives an elaboration of this "threefold synthesis" (A97) in the A-Deduction, which he explicitly references as such in the Metaphysical Deduction⁵⁹. Here the three fundamental act-types of synthesis are the acts of **(a) apprehension**, **(b) reproduction**, and **(c) recognition**⁶⁰, where the token-exercises of these act-types combine **(d) a manifold of sense-impressions** as it is given in receptivity⁶¹ independently of acts of the understanding⁶². Thus, according to Kant's most comprehensive and detailed presentation of synthesis, representing an object in empirical intuition requires:

⁵⁸ See H. Smit, "Kant on Marks and the Immediacy of Intuition", p. 244, n. 20.

⁵⁹ See A78/B103; and T. Hoepfner, *Urteil und Anschauung*, chapters 3.1-3.2; B. Longuenesse, "The Divisions of the Transcendental Logic and the Leading Thread", p. 117.

⁶⁰ See A97-110.

⁶¹ See A19/B33, A50/B74.

⁶² See B129, B145.

- (a) *apprehending a manifold* of sense-impressions “as such” (A99) by “running through the manifold and then taking it together” (ibid.), namely, to apprehend it *as* the representation of a manifold of sensible qualities, which is responsible for representing the perceivable qualitative features of an object of empirical intuition, say, the color, weight etc. of a body;
- (b) *reproducing the homogeneous parts* of an intuition (spatial/temporal parts), namely, “to grasp one of these representations [of parts] after the other” (A102), and “reproduce them while going on to the following” (ibid.) so that “a whole representation” (ibid.) can arise, which is responsible for representing the formally homogeneous whole of an object of empirical intuition, say, the extension and shape of a body;
- (c) *recognizing the unity* of above acts of apprehension and reproduction as partial acts of the same act of synthesis, namely, to have “consciousness of that unity of synthesis” (A103)⁶³ and thus recognize that “what we think is the very same [...] in the series of representations” (ibid.), which is responsible for representing the unity of an object and its features as they are represented through these acts, say, the unity of a substance and its accidents, such as the unity of a body and its qualitative and formal features; and, finally,
- (d) (non-representationally) *relating to the object* based on a manifold of sense-impressions, namely, presentations of simple sensible qualities such as color, weight, etc., as the effects of objects on sensibility, and given in receptivity as the passive ability to have sense-impressions within certain forms (space or time), which is responsible for the fact that empirical “intuition contains manifoldness [of sense-impressions]”. (A97)⁶⁴

By performing token-exercises of these act-types, representing subjects have empirical intuitions of objects. This brings out a transformational dimension of Kant’s analysis of synthesis, where having an empirical intuition forms the alaysandum and the act of synthesizing of sense-impressions forms the analysans: Kant analyzes *intuitions of objects* in terms of *acts of synthesizing sense-impressions*. In the final analysis, intuitions of objects *just are* token-acts of synthesizing sense-impressions: they are *nothing other than* acts of synthesis operating on and modified by particular manifolds of sense-impressions. For instance, a (veridical) empirical intuition of a body is nothing other than a complete (i.e., threefold) token-act of synthesis operating on and modified by a particular manifold of sense-impressions as produced by a body.

⁶³ See also A108, B138.

⁶⁴ See also A99-100.

As can be seen from the parallels with Kant's method of isolation above, the results of Kant's analysis of the unity of an empirical intuition not only *repeat* but also *deepen* the preliminary results of his method of isolation. Thus, it is only with the view of a synthesis through the understanding that it becomes intelligible how the various aspects of experiences, contributed by both sensibility and the understanding, can come together in the empirical intuition of an object: it is only through the act of *apprehension* that *sense-impressions* given by an object are incorporated into an empirical intuition, just as it is only through the act of *reproduction* that its *pure intuition* is incorporated, while it is only through the act of *recognition* that they are all taken together as representing one and the same object.

But this account of an act of combination as enabling empirical intuitions to represent objects and their features is not yet a complete account of the source or origin of concepts: it is not yet an account of *the origin of the categories* as the metaphysical concepts of an object in general. How it can be used to such effect is the topic of my next and final two sections.

3. KANT ON CONCEPT-FORMATION: THE SOURCES OF EMPIRICAL, MATHEMATICAL, AND METAPHYSICAL CONCEPTS

Kant's Metaphysical and Subjective Deductions concern the source or origin of the categories as those concepts through which we purport to have philosophical cognition of objects in general, which origin is supposed to lie solely in our capacity for thought or the understanding. When Kant asks for the origin of concepts, he generally asks *why concepts have the representational contents they do*, where the *content* of a concept is, again, its representational relation to its object (see in section 1)⁶⁵. How is it to be explained that concepts possess the contents they do, namely, representationally relate to the kinds of object they do? The representational *content* of a concept, which makes it the concept it is, is to be distinguished both from the *form* it shares with concepts as such and from the *object* it representationally relates to.

A *concept* has a *general form* in that it represents in a way that can hold of various individuals⁶⁶. Concepts represent *kinds* or *features* that can be common to various objects. For instance, the ordinary empirical concept <metal> represents the kind metal to which individual pieces of metal belong as they share specific (perceivable) features, say, lustrousness. Its form consists in its representing generally, which makes it a concept; its content consists in its representing the particular kind

⁶⁵ Significantly shorter versions of parts of the following two sections will also appear in a forthcoming article on "Kantian Experience and Concept-Formation".

⁶⁶ See B39-40, A320/B376-377, *Logic* 9:91.

metal, which makes it the particular concept <metal>. By contrast, a *sensible intuition* possesses a *singular form* in that it represents in a way that can hold of only one object⁶⁷. For instance, an intuition of metal represents exactly one individual piece of metal, one object of the senses that is lustrous and occupies particular spatial and temporal positions and relations. Its form consists in representing singularly, which makes it an intuition; its content consists in representing a piece of metal, which makes it a particular intuition <this (piece of) metal>. Both concepts and intuitions consist of *partial representations* or *marks*⁶⁸. The partial representations of a concept are *discursive marks* representing general features and genera of the kind of object represented by the concept. For instance, the concept <metal> is constituted both of partial concepts such as <lustrousness> and of concepts of higher kinds (genera) such as <body>. The partial representations of an intuition are *intuitive marks* representing individual features and parts of the object represented by the intuition. For instance, an intuition <this (piece of) metal> is constituted of partial intuitions such as <this lustrous part of this (piece of) metal>. Just like intuitions and concepts, intuitive marks represent singularly, while discursive marks represent generally.

We ourselves produce the *generality* of concepts through cognitive acts, as it cannot be given to us by the senses⁶⁹. In doing so, we require, as Kant puts it in the *Metaphysical Deduction*, that “representations are given to first of all transform them into concepts, which happens analytically.” (A76/B102) He goes on to say a little more about both the requirement of given representations and the act of analysis by which we form concepts. Thus: “Before any analysis of our representations, these must first be given, and no concepts can originate *as to their content* analytically.” (A77/B103) And: “Various representations are brought *under* a concept analytically.” (A78/B104) To form concepts, namely, general representations of kinds or features of objects, we require already contentful representations of objects as given, which we then transform into a concept by an act of analysis of the given representations that consists in bringing them under the concept. Such already contentful representations are thus what the *original* contents of concepts are based on.

In the unpublished First Introduction to the *Critique of the Power of Judgment*, Kant gives a more succinct description of the act of concept-formation through analysis, namely, in terms of

⁶⁷ See A32/B47, A320/B376-377, *Logic* 9:91.

⁶⁸ See *Refl* 2280-86 16:298-300; and Michael Wolff, *Die Vollständigkeit der kantischen Urteilstafel*, Frankfurt a. M., 1995, pp. 65–66; H. Smit, “Kant on Marks and the Immediacy of Intuition”, pp. 247–260; Stefanie Grüne, *Blinde Anschauung. Die Rolle von Begriffen in Kants Theorie sinnlicher Synthesis*, Frankfurt a. M., 2009, pp. 54–71. I treat marks as partial representations, and not *also* as the features they represent, as Smit does, or *only* as such represented features, as Grüne does.

⁶⁹ See *Logic* 9:91-95, *Refl* 2855 16:547.

how one can compare a given representation with others and by extracting that which it has in common with various [representations] as a mark for general use, can make oneself a concept. (20:211n.)

To form a concept through an analysis of given representations, then, is to compare various representations of objects and to attend to the marks they share in order to then extract *a representation only of this commonality*, which is a concept under which the objects of these various representations can be brought⁷⁰. For instance, by comparing various empirical intuitions of bodies and by finding that they share, among others, intuitive marks of lustrousness, conductivity etc., one can, by abstracting from their differences, form the empirical concept <metal>. This, then, is the concept of the kind of object to which lustrous, conductive etc. bodies belong, namely, individual pieces of metal that are the objects of these various representations. As is elaborated in the *Logic* based on Kant's own notes and on student notes to his lectures on logic, to form a concept as a general representation requires the exercise of three constitutive acts that operate on representations of objects, typically empirical intuitions, which are individually necessary and, together with the representations operated on, jointly sufficient for forming a concept, namely:

- a *comparison* of various representations of objects;
- a *reflection* on what they share; and
- an *abstraction* from what distinguishes them⁷¹.

That the empirical concept of a kind of object is formed based on empirical intuitions of individuals of that kind is also shown by the fact that *the same objects* that are represented by intuitions fall under the concept of the corresponding kind. For instance, an intuition <this (piece of) metal> represents an individual object, namely, a piece of metal, which also falls under the concept of the corresponding kind, namely, <metal>. Thus, intuitions of individuals and the concept of the corresponding kind have *the same content* which occurs *in different forms*⁷². This sameness of content is already implied by Kant's description of concept-formation as a *transformation* of given representations into concepts in the *Metaphysical Deduction*⁷³, where it is precisely the representational content that remains the same. Thus, as he expressly elaborates with respect to ordinary empirical concepts in the *Progress*:

⁷⁰ See H. Smit, "Kant on Marks and the Immediacy of Intuition", pp. 256–259.

⁷¹ See 9:94-95, *Refl* 2854-83 16:547-558, *V-Lo/Pölitz* 24/2:566-567, *V-Lo/Busolt* 24/2:654, *V-Lo/Wiener* 24/2:907-909; and S. Grüne, *Blinde Anschauung. Die Rolle von Begriffen in Kants Theorie sinnlicher Synthesis*, pp. 14–16.

⁷² See also H. Smit, "Kant on Marks and the Immediacy of Intuition", p. 241, n.14, pp. 256, 259.

⁷³ See A76/B102.

If a concept is taken from the representation of the senses [=empirical intuition], i.e., an empirical concept, it contains something as a mark, i.e., as a partial representation, that was already comprehended in the representation of the senses and differs from the intuition of the senses only in logical form, namely, general validity [...]. (20:273-274)

For instance, an intuition <this (piece of) metal> and the ordinary empirical concept <metal> have the same content occurring in different forms, singular or general. After all, both the intuition and the concept are representations of *metal*. Regarding features of metal, say, lustrousness, this means that an intuition <this (piece of) metal> and the concept <metal> are constituted of corresponding marks: an intuition <this (piece of) metal> is constituted of, among others, an intuitive mark <this lustrous part of this (piece of) metal>, while the concept <metal> is constituted of, among others, the discursive mark <lustrousness>.

This common content of empirical concepts and empirical intuitions is explained by the fact that a content *given in intuitions* of objects of a particular kind is *taken by a concept* of this kind as formed on their basis. In this case, the acts of concept-formation are *directed at empirical intuitions* that represent individual objects of the senses and their perceivable features⁷⁴. Intuitions and their intuitive marks thereby *determine the contents of ordinary empirical concepts* formed on their basis that represent kinds of object of the senses and their perceivable features. The contents of ordinary empirical concepts are thus *derived from experiences of objects*⁷⁵. For instance, intuitions such as <this (piece of) metal> and their intuitive marks such as <this lustrous part of this (piece of) metal> determine the content of the concept <metal> and its discursive marks such as <lustrousness>. The original content of concepts formed in this way thus *depends on what the acts of their formation are directed at*, so that the contents of ordinary empirical concepts *relate derivatively to the contents of intuitions* based on which these concepts are formed. Consequently, in the formation of ordinary empirical concepts, contents given by determinations in experience are transferred to concepts.

Here, *as in the case of all other kinds of concept*, the acts of concept-formation merely bring already given contents into a general form. This is true of *all concepts*, since all concepts, as general, require contents based on which they can be formed through analysis, and which they thereby contain as their original contents, only in a general form. In producing the general form of a concept, *its original content, too, is determined*, namely, *depending on what the acts of its formation are directed at*. The above account of the formation of ordinary empirical concepts can therefore serve *as a model* for understanding the cases of other kinds of concept, particularly the case of the categories⁷⁶. And since, as

⁷⁴ See A76/B102, B133-134n., *Logic* 9:94-95.

⁷⁵ See A8/B12, A23/B38, A30/B46.

⁷⁶ See also B. Longuenesse, "The Divisions of the Transcendental Logic and the Leading Thread", p. 119.

discussed in the previous section, every content of *a possible cognition* begins with and ultimately goes back to the synthesis of an empirical intuition⁷⁷, not only will the given representations analyzed in concept-formation typically be *empirical intuitions*, but the various *fundamental aspects* of an empirical intuition distinguished in the previous section can also be expected to form the foundation for forming the various *kinds of concept* through which there can be a cognition of objects, namely: metaphysical, empirical (ordinary and scientific), and mathematical concepts.

Recall Kant's transcendental analysis of the components fundamental to experiences of objects from the previous section:

The contribution of the understanding to empirical intuition:

- (1) the representation of the unity of objects through empirical intuitions (analysandum), and the act of combination/the categories (analysans);

The contributions of sensibility to empirical intuition:

- (2) the representation of perceivable features of objects through empirical intuitions (analysandum), and the ability to receive sense-impressions as given by objects (analysans);
- (3) the representation of extension and shape/spatial and temporal relations of objects and their perceivable features through empirical intuitions (analysandum), and the pure intuition of extension and shape/spatial and temporal relations (analysans).

These three components fundamental to experiences of objects provide the foundation for the formation of the various kinds of concept through which there can be cognition, namely, metaphysical, empirical, and mathematical concepts, respectively. More precisely, when the relevant *aspects are isolated* through analysis in concept-formation, they contribute the various kinds of content based on which these kinds of concept can be formed:

- the representation of the unity of objects through empirical intuitions,* when considered in isolation, *contributes the content based on which metaphysical concepts such as <substance> can be formed (1)* (*in the final analysis: the act of recognizing various representations of perceivable and formal features as combined in one and the same act of representing an object (c));
- the representation of perceivable features of objects through empirical intuitions,* when considered in isolation, *contributes the content based on which ordinary and scientific empirical concepts such as <metal> can be formed (2)* (*in the final analysis: the act of apprehending the sense-impressions given by an object (a));

⁷⁷ See A19/B33, A68/B93, A77-78/B103, B133-134n.

- the representation of extension and shape/spatial and temporal relations of objects and their perceivable features through empirical intuitions,* when considered in isolation, *contributes the content based on which mathematical concepts such as <triangle> can be formed (3)* (*in the final analysis: the act of reproducing the homogeneous (spatial or temporal) form or pure intuition of an object **(b)**).

But according to Kant, not all these kinds of content are *given* in the way that the contents of *ordinary empirical concepts* are. The contents of the *categories* are *not given in experience*, while the contents of *mathematical concepts* are *not given at all* but rather *made* or *invented*, as are the contents of *scientific empirical* and so-called *usurped concepts*, as I will show in the next section. Nevertheless, it will turn out that *all these kinds of content* that precede and are incorporated into concept-formation can be considered as *various kinds of representational act* brought into a general form through analysis. The various kinds of concept just mentioned are to be individuated by reference to various kinds of representational act that yield their original contents. This brings me to my next and final section.

4. KANT'S DISCOVERY OF THE SPECIFIC DOMAIN AND SOURCE OF METAPHYSICS: DERIVING THE CATEGORIES FROM THE THREEFOLD SYNTHESIS OF A MANIFOLD OF SENSE-IMPRESSIONS IN AN EMPIRICAL INTUITION

In the Doctrine of Method of the *Critique*, Kant distinguishes between three possible answers to the question for the source of conceptual contents, corresponding to three kinds of concept⁷⁸:

- (A) Conceptual contents can originate from *experiences of objects*, which makes them *given contents* of *ordinary empirical concepts*. Typically, these are the concepts that form the domain of cognition as we have it in our ordinary lives, and that are formed through *ordinary*, everyday reflection.
- (B) Conceptual contents can originate from *the capacity of the understanding*, which makes them *given contents* of *pure concepts of the understanding*. These are the concepts that form the domain of metaphysical cognition, and that are formed through philosophical, namely, *transcendental* reflection.
- (C) Conceptual contents can originate from *being produced at will*, which makes them *made contents* of various kinds of *invented concept*: namely, *scientific empirical (C₁)*, *mathematical (C₂)*, or *usurped concepts (C₃)*.

⁷⁸ See A727-729/B755-757. See also *Logic* 9:93-94, *Refl* 2851 16:546.

These are concepts that we compose at will in various contexts and for various purposes, say, for the purpose of cognition in the empirical or mathematical sciences.

A concept is *given* just in case *determinations correspond to it* that are *not produced by a composition at will*⁷⁹. Such determinations are given either *a posteriori* in experiences of objects, as in the case of ordinary empirical concepts such as <metal>, where the relevant determinations are representations of perceivable features through empirical intuitions, for instance, of lustrousness (**A**); or *a priori* in the capacity of the understanding, as in the case of the pure concepts that are the categories such as <substance>, where the relevant determinations are fundamental abilities and acts of this capacity, for instance, the act of representing a common bearer of features (**B**)⁸⁰. By contrast, to a concept *composed at will* there corresponds *no determination in the capacity of the understanding or in experience* (**C**): as Kant puts it in the Doctrine of Method, it is “given to me neither by the nature of the understanding nor by experience” (A729/B757).

This distinguishes kinds of concept by reference to their content (Figure 2):

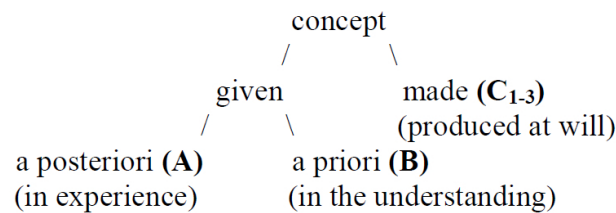


Figure 2: Kinds of concept as distinguished by their contents.

I will now go through these kinds of concept and the explanations of their content one by one, starting from (**A**), which serves as a model for the others, then moving on to (**C**), in order to finally give a detailed reconstruction of (**B**), which is the main goal of this essay.

The first way in which contents of concepts are *given* is *a posteriori*, through experiences of objects. Such are the contents of ordinary empirical concepts (**A**). For instance, the ordinary empirical concept <metal> represents the kind metal because it is based on empirical intuitions of pieces of metal and their perceivable features⁸¹. As shown in section 2, empirical intuitions of objects are *nothing other* than acts of synthesis operating on and modified by particular manifolds of sense-impressions. For instance, a (veridical) empirical intuition of metal is a complete (i.e., threefold) token-act of synthesis operating on and modified by a particular

⁷⁹ See *V-Lo/Wiener* 24/2:914, *V-Lo/Pölitz* 24/2:571.

⁸⁰ See A728/B756, *Logic* 9:93, *Refl* 2867 16:553, *V-Lo/Dohna* 24/2:756.

⁸¹ See A84-85/B116-117.

manifold of sense-impressions produced by a piece of metal. This means that the acts of forming the ordinary empirical concept <metal> are *directed at specific acts of synthesis* operating on and modified by particular manifolds of sense-impressions produced by pieces of metal, where they isolate *perceivable features* represented by these syntheses such as lustrousness (2). Ordinary empirical concepts represent particular kinds of object of the senses and their perceivable features because their formation as general concepts is based on *an analysis of specific (syntheses of) empirical intuitions* of such objects, whereby the representational contents of these syntheses are transferred to ordinary empirical concepts.

While the ordinary empirical concept <metal> is indeed given to us a posteriori, namely, through empirical intuitions of pieces of metal, we only form a “distinct concept [of metal]” (*V-Lo/Wiener* 24/2:914) and thus discover “the nature of metal” (*ibid.*) – as, say, involving conductivity – through *experimental trials*, namely, “through various experiences that do not lie in the [given] concept” (*ibid.*), as Kant is recorded to have elaborated in a lecture on logic⁸². The *scientific* and *distinct* empirical concept of the nature of metal is then “a made concept a posteriori” (*ibid.*), which, for instance, contains not only <lustrousness> but also <conductivity>. This is the first way in which contents of concepts are *made*, namely, *a posteriori*. These are the contents of scientific empirical concepts (C₁)⁸³. The acts of forming the concept of the *nature* of metal are again *directed at specific acts of synthesis* operating on and modified by particular manifolds of sense-impressions produced by pieces of metal, but where they now isolate (though perhaps only indirectly) perceivable features such as conductivity, which are represented by syntheses as they are exercised *under specific experimental conditions* and which thus combine intuitive marks of, say, lustrousness *and* conductivity. Scientific empirical concepts represent the nature of particular kinds of object of the senses and (though perhaps only indirectly) their perceivable features because their formation as general concepts is based on *an analysis of (syntheses of) empirical intuitions* of such objects occurring *under specific experimental conditions*, whereby the representational contents of these syntheses are transferred to scientific empirical concepts.

If instead one isolates the formally homogeneous pure intuition of *extension and shape*, consisting only of a manifold of spatial (or temporal) positions and relations, one considers the domain of mathematics, in particular, geometry. While the spatial (and temporal) form of our senses is given to us a priori by the nature of our sensibility⁸⁴, the *contents* of specific mathematical concepts are *constructed a priori* in pure intuition. This is the second way in which contents of concepts are *made*, namely, *a priori*⁸⁵. The acts of forming made mathematical concepts (C₂) such as <triangle> are *directed at specific acts of construction* (production and

⁸² See also *V-Lo/Busolt* 24/2:657, *V-Lo/Wiener* 24/2:918-919.

⁸³ See A728-729/B756-757, *Logic* 9:141.

⁸⁴ See *Discovery* 8:221-223.

⁸⁵ See A594/B622, *Logic* 9:141.

reproduction) of homogeneous mathematical figures, where they isolate the *formal features* represented by these syntheses, say, three-sidedness **(3)**. Thus, as Kant elaborates in the Doctrine of Method,

I construct a triangle by presenting the object corresponding to this concept, either by mere imagination in pure intuition, or after that also on paper in empirical intuition [...]. [In doing this,] it is always only looked at the act of constructing the concept, for which many determinations, e.g., of the size, the sides, and the angles, are totally indifferent, so that it is abstracted from these differences, which do not change the concept of a triangle. (A713-714/B741-742)

Mathematical concepts represent the nature of particular kinds of mathematical object and their formal features, because their formation as general concepts is based on *an analysis of acts of constructing pure intuitions* of such objects, whereby the representational contents of these acts are transferred to mathematical concepts.

The third and final way in which contents of concepts are *made* is by an *arbitrary composition*. Such are the contents of made usurped concepts (**C₃**). The acts of forming, say, the concept <fate> are *directed at specific acts of arbitrarily composing concepts*, where they isolate arbitrary compositions of the concepts <blindness> and <necessity> in the concept of a blind, namely, lawless necessity (=fate)⁸⁶. Usurped concepts such as <fate> are composed in such a way that there cannot even be anything corresponding to them in the object⁸⁷, “as one can invoke no legal ground, neither from experience nor from reason, whereby the entitlement to their use was made clear” (A84-85/B117). Unlike all the other kinds of concept, usurped concepts cannot be cognitions, since they have no basis in any aspect of the synthesis of empirical intuitions.

But what, if anything, is the basis for the content of metaphysical concepts, which, just like usurped concepts, have no perceivable basis in experiences of objects? For instance, just like <fate>, the category <causation> cannot originate from experiences of objects, since to it too no perceivable features of objects of experience correspond in empirical intuitions⁸⁸:

[P]ure concepts of the understanding [...] can never be encountered in any intuition. [...] for no one will say: this [category or the kind/feature it represents], e.g., causation, could as well be intuited by the senses and is contained in the appearance (A137-138/B176-177).

How, then, can a concept such as <causation> still have a content and relate to its object (namely, the kind/feature causation)? How are we to explain the origin

⁸⁶ See *V-MP/Mron* 29:926, *V-MP-LI/Pölitz* 28:199-200.

⁸⁷ See *V-MP-LI/Pölitz* 28:199.

⁸⁸ See A84-85/B116-117.

of a conceptual content if “it cannot be ascribed to the objects” (A56/B80)? Kant’s general answer is that a pure concept, which is a category, other than usurped concepts, possesses a “transcendental content” (A79/B105)⁸⁹ and has “its origin only in the understanding” (A320/B377). More specifically, Kant announces that if categories indeed “relate to objects a priori” (A57/B81), they do so “as acts of pure thought” (ibid.).

This is the other way in which contents of concepts are *given*, namely, *a priori* through the capacity of the understanding. Such are the contents of *categories* (**B**). For instance, the category <substance> represents the kind substance, because it is based on corresponding representational abilities and acts of the understanding, more precisely, on the act of representing a common bearer of features. This seems to mean that the acts of forming categories such as <substance>, through philosophical or transcendental reflection, are *directed at representational abilities and acts of the understanding*, say, on the act of representing a common bearer of features, where they isolate *the fundamental abilities and acts responsible for representing the unity of an object in empirical intuition* (**I**). The metaphysical concepts, which are the categories, represent objects in general, because their formation as general concepts is based on a *philosophical analysis of acts of combination or the synthesis of an empirical intuition*, whereby the representational contents of these acts are transferred to metaphysical concepts.

As Kant puts it already in an early note: “The concepts of the understanding [categories] all express acts of the powers of the mind” (*Refl* 4642 17:622)⁹⁰. But the view that the content of the categories is based on fundamental acts of thinking objects also emerges in passages from the *Critique* and *Prolegomena*, according to which a “pure concept [contains] only the form of thinking an object in general” (A51/B75), or such concepts “contain only the thinking of an object in general” (4:282), respectively. Pure concepts (of the understanding), as Kant expressly says here, *contain only the thinking of objects in general as their content*. He most clearly states the view that those acts, on which the formation of the categories is based, are, more specifically, *acts of the synthesis of intuition*, both in the Metaphysical Deduction, where he develops the idea of the categories precisely as “concepts of synthesis” (A80/B106), and in the Doctrine of Method, where he describes them, more precisely, as “concepts of the synthesis of possible sensations” (A723/B751), namely, as based on the synthesis of *empirical* intuitions. Regarding their content, “pure categories” (A349) are nothing other than “functions of synthetic unity” (ibid.) of a manifold of sense-impressions. Again, it is in the Doctrine of Method that Kant most clearly identifies this synthesis as *the synthesis of an empirical intuition in general*, in contrast to both syntheses of specific empirical

⁸⁹ See also A53/B77.

⁹⁰ See also *Refl* 2857 16:548, *Refl* 3930 17:352, *Log-Philippi* 24/1:452.

and pure intuitions, on which, rather, empirical (**A**) and mathematical concepts (**C₂**), respectively, are based:

[I]f the transcendental concept of a reality, substance, power etc. is given to me, it signifies neither an empirical nor a pure intuition, but only the synthesis of empirical intuitions [...] (A722/B750)⁹¹.

If the categories are to be concepts of *an object in general*, their content must be based on what characterizes *the synthesis of an empirical intuition as such*, since it is through empirical intuitions as such that objects are represented in general, namely, independently of any empirical or formal specificities going back to specific sense-impressions or pure intuitions, respectively⁹². Or as Kant rhetorically asks in the epigraph to this essay, taken from the beginning of the Postulates of Empirical Thought in General, after explicitly distinguishing two kinds of a “concept, which contains a synthesis in itself” (A220/B267), namely, *empirical concepts* (**A**) containing a “synthesis [...] borrowed from it [experience]” (ibid.), on the one hand, and *pure concepts* (**B**) containing a “synthesis [...] on which, as condition a priori, experience in general (its form) rests” (ibid.)⁹³, on the other:

For from where will one take the character of the possibility of an object that was thought through a synthetic concept a priori, if not from the synthesis which constitutes the form of the empirical cognition of objects? (ibid.)

Kant's development of this idea of the categories as “concepts of synthesis” (A80/B106, A723/B751) culminates in the following claim of the Metaphysical Deduction: “Now the *pure synthesis, generally represented*, gives the pure concept of the understanding.” (A78/B104) He repeats this thought only a little later by saying that “the mere synthesis of various representations *in an intuition* [...], generally expressed, is called the pure concept of the understanding.” (A79/B105)

⁹¹ See also A719/B747; H. Smit, “Kant on the Apriority and Discursivity of Philosophy”, pp. 748–750.

⁹² See H. Smit, “Kant on the Apriority and Discursivity of Philosophy”, pp. 745, 747–748). That the fundamental form of the synthesis of an *empirical* intuition provides the original content of the categories is overlooked by Béatrice Longuenesse (“The Divisions of the Transcendental Logic and the Leading Thread”, pp. 107, 119), who instead ascribes this role to the synthesis of *pure manifolds* into *pure intuitions*. On this basis alone, however, the categories could not be concepts of *objects*, but only of *spatial/temporal forms* (extension, shape), which in effect makes them *mathematical* concepts. Moreover, if the categories were based only on a synthesis of a specifically *spatial/temporal pure manifold*, Kant would lose the level of abstraction of a *sensible intuition in general*, which he requires both for the Metaphysical (see A79/B105) and for the first step of the Transcendental Deduction in B (see B143), effectively undermining the rationale for both the Schematism and the second step of the B-Deduction. Of course, the synthesis of (generic) pure manifolds is *part* of the synthesis of an *empirical* intuition in the reading developed in this essay, namely, as belonging to the formal contribution of sensibility (**3**) synthesized in reproduction (**b**).

⁹³ See also A95-96.

Given what has been elaborated in this essay, Kant could not be clearer: If the abilities and acts of pure (or mere) synthesis are represented generally, namely, as the contents of general concepts, they *are* the pure concepts of the understanding or categories. The notion of a pure synthesis is exactly parallel to that of a pure intuition as it was isolated in the Aesthetic as sensibility's formal contribution to experience, only that *pure synthesis* is *what is contributed by the understanding to an empirical intuition*, namely, its unity or combination **(1)**. It is thus precisely here that Kant performs the abstraction he describes at the beginning of his *Orientation* essay. This pivotal thought of Kant's derivation of the categories from synthesis is perfectly expressed in a passage from student notes to one of his lectures on metaphysics:

The understanding alone has combined the manifold in the representation and through the consciousness of the combination originated the concept. On this rests the pure concept of the understanding or concept a priori. (V-MP/Arnoldt 29:978)

All this can now be understood as claiming that the acts of forming the categories, through transcendental reflection, are *directed at the abilities and acts of a synthesis of an empirical intuition*, which in turn determine the original contents of the categories by being transformed, through analysis in concept-formation, into contents representing in a general way. *The original contents of the categories are derived from abilities and acts of the synthesis of empirical intuition*⁹⁴. More precisely, the contents of the categories derive from the pure form that all acts of a synthesis of an empirical intuition share, regardless of what is given in sensibility and in what sensible form. *But what exactly are these acts?* Kant immediately explains that the “*pure synthesis*” (A78/B104) is “the one which rests on a ground of synthetic unity a priori” (ibid.). But such grounds are precisely the acts of *apprehension (a)*, *reproduction (b)*, and *recognition (c)* of a manifold of *sense-impressions* given by objects **(d)** from the end of section 2, treated in A's Subjective Deduction of the “subjective sources which comprise the grounding a priori for the possibility of experience” (A97) in the section correspondingly called

⁹⁴ See also *Letters* 12:222, 13:468; *Refl* 5643 18:283; V-MP/Schön 28/1:482, V-MP/Arnoldt 29:984; and H. Smit, “The Role of Reflection in Kant's *Critique of Pure Reason*”, pp. 218–219; S. Grüne, *Blinde Anschauung. Die Rolle von Begriffen in Kants Theorie sinnlicher Synthesis*, pp. 141–143; E. Förster, *Die 25 Jahre der Philosophie. Eine systematische Rekonstruktion*, p. 36). While I disagree with Smit's claim that transcendental reflection not only *discovers* but also *originates* the categories, I also reject Grüne's suggestion that the formation of the categories is based on an *empirical* reflection on what is common to *particular token-acts* of a synthesis of intuition, since the fundamental form of this synthesis is inaccessible to such reflection and thus can only be discovered in (transcendental) philosophy. Rather, as against Smit, it is the fundamental form of a *synthesis* of an empirical intuition that *originates* the contents of the categories, while transcendental reflection only *discovers* this; and, as against Grüne, *transcendental* reflection is also the *only reflection* that can do this.

“Of the grounds a priori to the possibility of experience” (A95). For it is precisely these acts that constitute any representation of an object in experience.

This means that the *particular categories* are to be derived from *particular, generic act-types of synthesis*. Thus, as Kant expressly states in the *Progress*,

there lie as many concepts a priori in the understanding, under which objects given to the senses must stand, as there are kinds of combination (synthesis) with consciousness, i.e., as there are kinds of the synthetic unity of apperception of the manifold given in intuition. (20:271)⁹⁵

Accordingly, the four aspects of a synthesis of an empirical intuition from section 2 can be seen to form the four headings of the table of categories (Figure 3)⁹⁶:

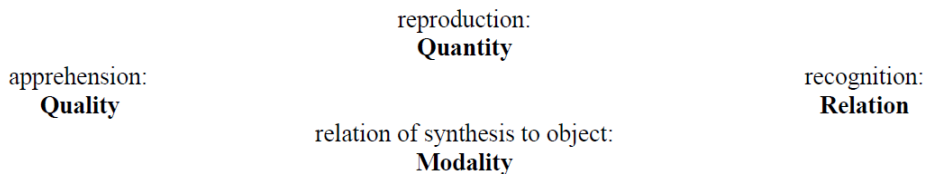


Figure 3: The four headings of the table of categories and the corresponding aspects of a synthesis of an empirical intuition.

To elaborate:

– The categories of *Quantity* – <unity>, <plurality>, and <totality> –, which concern “objects of intuition” (B110),⁹⁷ originally consist in *reproducing a homogeneous part of an intuition, a plurality, and a totality of such parts* (i.e., temporal or spatial parts), representing the homogeneous parts and wholes of objects of intuition (**b**)⁹⁸.

– The categories of *Quality* – <reality>, <negation>, and <limitation> –, which also concern “objects of intuition” (B110), originally consist in *apprehending the form of intuition as filled by sense-impressions, empty, and partly filled* (i.e., the form of time or space), representing the reality and lack of reality of perceivable features of objects of intuition (**a**)⁹⁹.

– The categories of *Relation* – <substance-accident>, <cause-effect>, and <community> –, which concern “the existence of these objects [of intuition] [...] in relation to one another” (B110),¹⁰⁰ originally consist in *recognizing the unity of acts*

⁹⁵ See also M. Wolff, *Die Vollständigkeit der kantischen Urteilstafel*, p. 68.

⁹⁶ See A80/B106, *Prolog* 4:302-303.

⁹⁷ See also A160/B199.

⁹⁸ See A242/B300, B162, B203, A720/B748, *Refl* 6338a 18:659, 661.

⁹⁹ See A143/B182, A168/B209, A175-176/B217, A242/B300, *Refl* 6338a 18:660-661, 663.

¹⁰⁰ See also *Refl* 5697 18:329, *Met-K3E* 29:1002.

of synthesizing (one, two, or several) intuitions, representing the objective unity of (one, two, or several) objects of intuition and their features (**c**)¹⁰¹.

– The categories of *Modality* – <possibility>, <actuality>, and <necessity> –, which concern “the existence of these objects [of intuition] [...] in relation [...] to the understanding” (B110)¹⁰², express the (non-representational) *relation of synthesis to object*: the object’s conformity to the synthetic (categorical) and sensible (spatial and temporal) form of cognition, its connection also to the matter of cognition (sense-impressions), or its necessity as the effect of a cause (**d**)¹⁰³.

Thus, the aspects that are fundamental to the synthesis of an empirical intuition turn out to be the basis for forming the categories, which formation yields their original content. Being formed in this way, the categories are based on considering what most fundamentally characterizes *the synthesis of an empirical intuition as such*, namely, regardless of what is given in sensibility and in what sensible form. And since *empirical intuitions as such* represent what most fundamentally characterizes *objects in general*, namely, independently of their specific qualitative or formal features, this in turn makes the categories *the concepts of an object in general*. Moreover, this finally establishes the specific domain of a genuinely metaphysical cognition, namely, a rational cognition through concepts of an object in general, by discovering the fundamental metaphysical concepts through a philosophical analysis, in transcendental reflection, of our own capacity for cognition as their specific source.

The use of models is characterized not only by analogies but also by disanalogies. Thus, there is also a fundamental difference between the *two kinds of reflection* at play in forming concepts whose contents are given a posteriori in experience (i.e., ordinary empirical concepts (**A**)), on the one hand, and concepts whose contents are given a priori in the nature of the understanding (i.e., the categories (**B**)), on the other. While we all form ordinary empirical concepts such as <metal> *in our everyday dealings with specific empirical intuitions of specific objects*, the categories such as <substance> are formed *in the course of a philosophical investigation* of the very capacity to have empirical intuitions of

¹⁰¹ See B162-163, B218-219, *Refl* 5854 18:369, *Refl* 6338a 18:662.

¹⁰² See also A219/B266, *Refl* 5697 18:329.

¹⁰³ See A218-219/B265-266, A233-234/B286-287, *Refl* 5228 18:125-126. N.F. Stang (“Kant on the Metaphysical Deduction of the Categories”, pp. 134–144) attempts to derive the categories *directly from the logical functions of judgment*, thereby *skipping the route via the synthesis of intuition* taken here and intended by Kant. Since only the fundamental form of a synthesis of empirical intuitions represents the fundamental features of objects in general and thus can transfer this content to the categories, thereby making them concepts of an object in general, I indeed consider this to be the only possible way. The logical functions of judgment alone do not tell us *what an object of cognition is*, only the real functions of a synthesis of empirical intuition do, which is precisely what is at issue.

objects in the first place. This philosophical or transcendental reflection¹⁰⁴, by which we form the categories *as they are originally explained and systematically presented* in the Analytic of Concepts, is performed in Kant's Metaphysical and Subjective Deductions, where it turns out to be based on a philosophical analysis of the synthesis of an empirical intuition. In reflecting on these fundamental abilities and acts of a synthesis of empirical intuition in (transcendental) philosophy, they are thought of as representational contents of general concepts – in Kant's words, they are “*generally represented*” (A78/B104) or “*generally expressed*” (A79/B105) –, whereby we first of all form the categories as the *metaphysical concepts of an object in general*¹⁰⁵. The very fact that their content relates *derivatively* to the representational abilities and acts of synthesis in relation to which they are formed – which abilities and acts *all of us*, philosophers or not, possess and exercise whenever we have empirical intuitions of objects –, makes them *given concepts*, whose representational content is given to us a priori, namely, through determinations (abilities and acts) of the understanding itself. It is in precisely this sense that “the *pure synthesis*” (A78/B104), namely, the generic form of the synthesis of empirical intuitions, “gives [!] the pure concept of the understanding.” (ibid.)

These differences between ordinary empirical concepts and categories can be presented as follows (Figure 4):

Kind of given concepts	Empirical concepts (given a posteriori)	Categories (given a priori)
Kind of content, i.e., representational object-relation	Empirical contents: relations to particular kinds of empirical object (say, metal)	Transcendental contents: relations to specific features of objects in general (say, causation)
Domain of concept-formation	Specific empirical intuitions (determinations in experience)	Pure synthesis (determinations of the understanding), i.e., the generic form of empirical intuitions
Kind of reflection in concept-formation	Empirical, ordinary reflection	Transcendental, philosophical reflection

Figure 4: The differences between empirically and a priori given concepts.

CONCLUSION

I have said above that if metaphysics is to have its specific domain of cognition, the specific source of its concepts must be the capacity for cognition and its exercise alone, independent of whatever is or can be given to the senses. The capacity and exercise of the understanding alone is the source of (true) philosophical cognition. What has been shown in this essay is *exactly how*, in this

¹⁰⁴ See A260-263/B316-319.

¹⁰⁵ See also footnote 15.

sense, we are able to metaphysically cognize *the most fundamental features of objects of experience* based on a transcendental meta-cognition of *the most fundamental abilities and acts of that capacity through which we experience objects*. While ordinary and scientific empirical concepts are based on what is given to us through sense-impressions, and mathematical concepts on what can be constructed in pure intuition, metaphysical concepts go back to *the most fundamental aspects in experiences of objects as they are contributed by our own capacity to have them*, namely, through the exercise of a synthesis of empirical intuitions. This, at long last, is precisely the sense in which the metametaphysical cognition of the *Critique* constitutes a form of *self-cognition* of our rational capacity¹⁰⁶.

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