

The Metaphysical Deduction of the Categories

PHIL 871

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1 Two Kinds of Logic

Pure General Logic: the science of the norms or rules constitutive of thinking (or judging) in general, which abstracts from any relation to an object whatsoever (A55/B79)¹

- Abstracts from all *content* (relation to an object) of thought²
- Purely *formal*

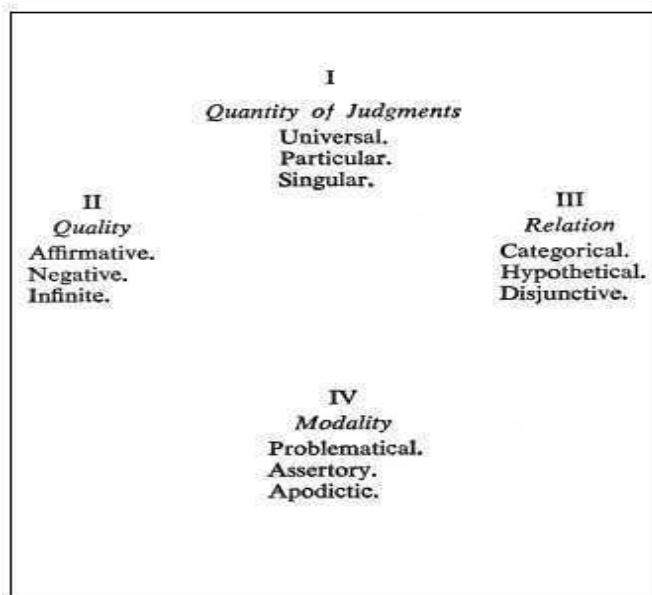
Transcendental Logic: the science of the norms or rules constitutive of thinking of an object in general, in whatever way it might be given in intuition

- Not purely formal; articulates the conditions on employing the concept <object> in thinking of anything whatsoever³
- Articulates the most general conditions for objective thought

2 The Metaphysical Deduction⁴ (§§9-12)

Function: mental activity by which different representations are ordered under a common one⁵

2.1 The Forms of Judgment⁶



¹ [Pure logic] contains the absolutely necessary rules of thinking, without which no use of the understanding takes place, and it therefore concerns these rules without regard to the difference of the objects to which it may be directed...A **general** but textbfpure logic therefore has to do with strictly *a priori* principles and is a **canon of the understanding** and reason, but only in regard to what is formal in their use, be the content what it may (empirical or transcendental). (A52-3/B76-7)

² As general logic it abstracts from all contents of the cognition of the understanding and of the difference of its objects, and has to do with nothing but the mere form of thinking. (A54/B78)

³ since every division presupposes a concept that is to be divided, a still higher one must be given, and this is the concept of an object in general (taken problematically, leaving undecided whether it is something or nothing). (A290/B346)

⁴ In the **metaphysical deduction** the origin of the *a priori* categories in general was established through their complete coincidence with the universal logical functions of thinking, in the **transcendental deduction**, however, their possibility as *a priori* cognitions of objects of an intuition in general was exhibited. (B159)

⁵ By a function, however, I understand the unity of the action of ordering different representations under a common one...Now the understanding can make no other use of these concepts than that of judging by means of them... In every judgment there is a concept that holds of many, and that among this many also comprehends a given representation, which is then related immediately to the object...All judgments are accordingly functions of unity among our representations, since instead of an immediate representation [viz., an intuition] a higher one, which comprehends this and other representations under itself, is used for the cognition of the object, and many possible cognitions are thereby drawn together into one. (A68-9/B93-4)

⁶ If we abstract from all content of a judgment in general, and attend only to the mere form of the understanding in it, we find that the function of thinking in that can be brought under four titles, each of which contains under itself three moments" (A70/B95).

- Every judgment yields a “unity” (i.e. a propositional form) corresponding to the moments of the four types of judgment
 - Every judgment takes one moment from each group
 - * universal, affirmative, categorical and assertoric (‘all crows are black’)
 - * singular, negative, disjunctive and problematic (‘that bird might be neither a crow nor a raven’)
- Kant thinks that the 12 forms constitute all logically coherent cognitive acts which the understanding might engage in
- Kant also assumes that the only possible employment of concepts is in judgment⁷
 - this is how the forms of judgment provide a ‘clue’ to nature of the categories
 - they only provide a ‘clue’ however, because the forms of judgment are *formal* and thus lack any precise content — they thus cannot by themselves determine the content of the categories

⁷ “the understanding can make no other use of...concepts than that of judging by means of them. (A68/B93)

2.2 The Forms of Thought – The ‘Categories’

- The categories provide a dual role — they organize both intuition and concepts⁸
 - the dual role of the categories plus their connection to the forms of judgment yields (according to Kant) a determinate content—viz. the precise list of categories Kant provides

TABLE OF CATEGORIES	
I	
<i>Of Quantity</i>	
Unity.	
Plurality.	
Totality.	
II	III
<i>Of Quality</i>	<i>Of Relation</i>
Reality.	Of Inherence and Subsistence
Negation.	(<i>substantia et accidentia</i>).
Limitation.	Of Causality and Dependence
	(cause and effect).
	Of Community (reciprocity
	between the active and the
	passive).
IV	
<i>Of Modality</i>	
Possibility.	Impossibility.
Existence.	Non-existence.
Necessity.	Contingency.

⁸ The same function that gives unity to the different representations in a judgment also gives unity to the mere synthesis of different representations in an intuition, which, expressed generally, is called the pure concept of understanding. The same understanding, therefore, and indeed by means of the very same actions through which it brings the logical form of a judgment into concepts by means of the analytical unity, also brings a transcendental content into its representations by means of the synthetic unity of the manifold in intuition in general, on account of which they are called pure concepts of the understanding that pertain to objects a priori; this can never be accomplished by universal logic. (A79/B105)

2.3 Problems

- Completeness: Kant presents his table of judgment as if it were complete, but it seems ad hoc or arbitrary⁹
- Derivation: Kant claims that the all and only the categories may be completely derived from the table of judgment but give no such derivation
 - are the categories just *identical* with the forms of judgment?

3 On Synthesis (§10)

- A form of mental activity
 - Kant sometimes discusses synthesis as an ‘act’ [*Handlung*] but this is mildly misleading, as it may suggest that synthesis is a form of intentional action rather than an (at least sometimes involuntary) activity of the mind of which the subject may or may not be aware¹⁰
- Synthesis works on representations by “running through” and “gathering together” discrete representations into one combined and connected whole (A99)
 - Is synthesis a causal process?
 - * No? — would seem to be incompatible with deterministic world
 - * Yes? — realism about intentional states suggests that they have causal powers, and that the causal features and interactions between such states are what provide them with representational content and allow them to track logical relationships¹¹
- All cognition demands a synthesis of representation¹²
- Synthesis is carried out by the unitary subject of representation on representations that are either given to it in sensibility (i.e. intuition) or produced by it in thought (e.g. stipulative conceptual definition)
 - What Kant will attempt to show in the Deduction is that “experience” (in some sense of that term) depends on synthesis via application of the categories
- Two kinds of synthesized representations
 - concepts
 - * combination of concepts in one judgment
 - * combination of simpler concepts into a more complex concept (cf. A729/B757; Logik Pölitz 24:568)
 - the ‘manifold’ of intuition (either in one intuition or many)
 - * combination of sensations in one intuition (?)
 - this claim is controversial, as it suggests that intuition is constructed via synthesis
 - * combination of intuitions into a complex intuition

⁹ This division is systematically generated from a common principle,” namely the faculty for judging (which is the same as the faculty for thinking), and has not arisen rhapsodically from a haphazard search for pure concepts, of the completeness of which one could never be certain, since one would only infer it through induction, without reflecting that in this way one would never see why just these and not other concepts should inhabit the pure understanding. (A80-1/B106-7)

¹⁰ [synthesis] is a mere effect of the of the imagination, a blind though indispensable function of the soul...of which we are only seldom even conscious (A78/B103)

¹¹ It's not just that, in a psychology of propositional attitudes, content and causal powers are attributed to the same things. It's also that causal relations among propositional attitudes somehow typically contrive to respect their relations of content, and belief/desire explanations often turn on this. Hamlet believed that somebody had killed his father because he believed that Claudius had killed his father. His having the second belief explains his having the first. How? Well, presumably via some such causal generalization as ‘if someone believes Fa, then ceteris paribus he believes $\exists x(Fx)$.’ This generalization specifies a causal relation between two kinds of mental states picked out by reference to (the logical form of) the propositions they express... (Fodor (1987), 12)

¹² By synthesis in the most general sense, however, I understand the action of putting different representations together with each other and comprehending their manifoldness in one cognition. Such a synthesis is pure if the manifold is given not empirically but a priori (as is that in space and time)... The synthesis of a manifold, however, (whether it be given empirically or a priori) first brings forth a cognition, which to be sure may initially still be raw and confused, and thus in need of analysis; yet the synthesis alone is that which properly collects the elements for cognitions and unifies them into a certain content; it is therefore the first thing to which we have to attend if we wish to judge about the first origin of our cognition. (A77-8/B103)

4 The Task of the Deduction

- Demonstrate the legitimacy of the categories
 - legitimacy understood in terms of concepts which have their source in the mind (i.e. the categories) but which are correctly and justifiably applied to features present in experience
 - the “transcendental” nature of the argument is characterized as an argument which begins from obvious or uncontroversial premises and argues to some conclusion understood as a necessary condition for the possibility of the truth of those premises
 - Kant’s use of ‘*Deduktion*’ redeploys German legal vocabulary; in Holy Roman Empire Law, ‘*Deduktion*’ signifies an argument intended to yield a historical justification for the legitimacy of a property claim
 - * In Kant’s usage a deduction is an argument that aims to justify the use of a concept, one that demonstrates that the concept correctly applies to objects
 - the demonstration of their legitimacy proceeds by appealing to the necessary role of the categories in coming to have empirical *cognition* [*Erkenntniss*] of any sort
 - * confusingly, Kant often elides this notion of empirical cognition with the notion of “Experience” [*Erfahrung*]

4.1 Grades of ‘Experience’

- Kant’s usage of ‘experience’ [*Erfahrung*] is ambiguous throughout his work^{13,14}
 - (e1) having sensations
 - (e2) having sensations and being conscious of them
 - (e3) having intuitions
 - (e4) having intuitions and conceptualizing them (bringing them under concepts)
 - (e5) having intuitions and conceptualizing them by means of physical-object concepts
 - (e6) having intuitions and conceptualizing them as mine
 - (e7) having intuitions and making judgments about them
 - (e8) having intuitions and knowing propositions about them

¹³ In the first paragraph of the introduction to the work, Kant uses ‘experience’ in two different senses without calling the reader’s attention to the fact. The experience with which all our knowledge is said to begin is “the raw material of the sensible impressions”; experience in this sense is then said to be worked up by the understanding into “that knowledge of objects which is entitled experience” (B1). The same ambiguity runs throughout the work. (Van Cleve (1999), 73)

¹⁴ Empirical cognition, however, is experience (B166). Experience is an empirical cognition, i.e., a cognition that determines an object through perceptions (A176/B218). Therefore experience itself – i.e., empirical cognition of appearances – is possible only in as much as we subject the succession of appearances, and hence all change, to the law of causality (A189/B234).

5 The Structure of the Deduction

- Introduction (§§13-14)
- The problem of combination (§15)
- The first step (§§16-20)
- The second step (§§21-26)

5.1 Introduction

- §13 On The Principles Of A Transcendental Deduction As Such
 - Discussion of a need for a transcendental as opposed to a merely empirical deduction.
 - This is based on the fact that an empirical deduction is unavailable due to two reasons – viz.
 - (i) the a priori nature of the categories
 - (ii) their semantic content includes notions of necessity and universality (A91-2/B124)
- §14 Transition To The Transcendental Deduction Of The Categories
 - Discussion of the nature of empirical cognition as a complex of intuition and concept (A92-3/B125)
 - The categories are a necessary condition for the empirical cognition of objects – i.e. are necessary conditions for occurrence of thought about objects (of experience) (A93/B125-6)
 - Presents so called ‘Objective’ Deduction.¹⁵

THE ‘OBJECTIVE’ DEDUCTION

1. The experience of an object has both an intuitional and a conceptual component.^{16,17}
 2. The conceptual component can occur only if the categories apply to the object.
 3. ∴ The categories apply to all objects of experience.
- Premise (2) is based on the assumption of the soundness of Kant’s argument in the Metaphysical Deduction—viz. that the categories are necessary for any judgment whatsoever
 - i. Concepts are applied only in judgment
 - ii. The categories are necessary for the application of any concept in judgment
 - iii. ∴ The categories are necessary for any conceptually structured mental state

¹⁵ This inquiry, which goes rather deep, has two sides. One side refers to the objects of the pure understanding, and is supposed to demonstrate and make comprehensible the objective validity of its concepts a priori; thus it belongs essentially to my ends. The other side deals with the pure understanding itself, concerning its possibility and the powers of cognition on which it itself rests; thus it considers it in a subjective relation (Axvi-xvii)

¹⁶ There are two conditions under which alone the cognition of an object is possible: first, intuition, through which it is given ... ; secondly, concept, through which an object is thought corresponding to this intuition. (A92-93/B125)

Now all experience does indeed contain, in addition to the intuition of the senses through which something is given, a concept of an object as being thereby given. (A93/B126)

¹⁷ For a representation to be a cognition (though here I mean always a theoretical one), we need to have concept and intuition of an object combined in the same representation, so that the former is represented as containing the latter under itself. (*Progress*, 20:273-4)

THE 'SUBJECTIVE' DEDUCTION

- The 'Subjective' Deduction is some or all of the Transcendental Deduction proper (§§15-26)
 - sets up a problem (the problem of combination)
 - shows how the categories are necessary for the resolution of that problem

5.2 *The Problem of Combination (§15)*

- §15 On the possibility of a combination as such
 - what does Kant mean by 'combination' [*Verbindung*]¹⁸
 - why can't combination be given in intuition?¹⁹
 - what is the connection of the categories with combination?²⁰

5.3 *The First Step (§§16-20)*

- The primary goal of the first step is to demonstrate the truth of a conditional claim—viz. if there is cognition then the categories must play a role in its generation
 - §16 On the original synthetic unity of apperception
 - §17 The principle of the synthetic unity of apperception is the supreme principle for all use of the understanding
 - §18 What objective unity of self-consciousness is
 - §19 The logical form of all judgments consists in the objective unity of apperception of the concepts contained in them
 - §20 All sensible intuitions are subject to the categories, which are conditions under which alone their manifold can come together in one consciousness

5.4 *The Second Step (§§21-26)*

- The second step has two aims:
 - i. articulate the limited application of the categories in *cognition*—viz. they may be used only within the bounds of sensible experience
 - ii. demonstrate the actuality of cognitions in which the categories are applied (i.e. the antecedent of the conditional proven in the first step)
- The second step has six sections:
 - §21 Comment
 - §22 A category cannot be used for cognizing things except when it is applied to objects of experience
 - §23 [A commentary on §22]
 - §24 On applying the categories to objects of the senses as such

¹⁸ All combination (*conjunctio*) is either composition (*compositio*) or connection (*nexus*). The former is the synthesis of a manifold of what does not necessarily belong to each other...The second combination (*nexus*) is the synthesis of that which is manifold insofar as they necessarily belong to one another...(B201-2)

¹⁹ the combination (*conjunctio*) of a manifold in general can never come to us through the senses, and therefore cannot already be contained in the pure form of sensible intuition; for it is an act of the spontaneity of the power of representation, and, since one must call the latter understanding, in distinction from sensibility, all combination, whether we are conscious of it or not, whether it is a combination of the manifold of intuition or of several concepts, and in the first case either of sensible or non-sensible intuition, is an action of the understanding, which we would designate with the general title **synthesis** in order at the same time to draw attention to the fact that we can represent nothing as combined in the object without having previously combined it ourselves, and that among all representations **combination** is the only one that is not given through objects but can be executed only by the subject itself, since it is an act of its self-activity. (B129-30)

²⁰ Now the representation of a composite, as such, is not a mere intuition, but requires the concept of a compounding, so far as it is applied to the intuition in space and time. So this concept (along with that of its opposite, the simple) is one that is not abstracted from intuitions, as a part-representation contained in them, but is a basic concept, and a priori at that – in the end the sole basic concept a priori, which is the original foundation in the understanding for all concepts of sensible objects. There will thus be as many a priori concepts resident in the understanding, to which objects given to the senses must be subordinated, as there are types of compounding (*synthesis*) with consciousness, i.e., as there are types of synthetic unity of apperception of the manifold given in intuition. (*Progress*, 20:271)

- §25 [Commentary on §24, specifically intuition of the self]
- §26 Transcendental deduction of the universally possible use in experience of the pure concepts of understanding

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