

KANT, Immanuel
Prolegomena to Any Future Metaphysics
That Will Be Able to Come Forward As A Science
Indianapolis, Hackett 2002

KANT

PROLEGOMENA

2

NOTICE

This material may be protected by copyright law (Title 17 U.S. Code.)

*Preamble on the Peculiarities of all
Metaphysical Cognition*

§1. OF THE SOURCES OF METAPHYSICS

If it becomes desirable to present any cognition as science, it will be necessary first to determine exactly its differentia, which no other science has in common with it and which constitutes its peculiarity; otherwise the boundaries of all sciences become confused, and none of them can be treated thoroughly according to its nature.

The peculiar features of a science may consist of a simple difference of object, or of the sources of cognition, or of the kind of cognition, or perhaps of all three conjointly. On these features, therefore, depends the idea of a possible science and its territory.

First, as concerns the sources of metaphysical cognition, its very concept implies that they cannot be empirical. Its principles (including not only its basic propositions but also its basic concepts) must never be derived from experience. It must not be physical but metaphysical knowledge, i.e., knowledge lying beyond experience. It can therefore have for its basis neither external experience, which is the source of physics proper, nor internal, which is the basis of empirical psychology. It is therefore *a priori* cognition, coming from pure understanding and pure reason.

26

But so far metaphysics would not be distinguishable from pure mathematics; it must therefore be called pure philosophical cognition; and for the meaning of this term I refer to the *Critique of Pure Reason* ("Methodology", Chap. I, Sec. 1), where the distinction between these two employments of reason is sufficiently explained. So much for the sources of metaphysical cognition.

§ 2. CONCERNING THE KIND OF COGNITION
WHICH CAN ALONE BE CALLED METAPHYSICAL

a. *Of the Distinction between Analytic and Synthetic Judgments in General.*—The peculiarity of its sources demands that metaphysical cognition must consist of nothing but *a priori* judgments. But whatever be their origin or their logical form, there is a distinction in judgments, as to their content, according to which they are either merely *explicative*, adding nothing to the content of the cognition, or *ampliative*, increasing the given cognition: the former may be called *analytic*, the latter *synthetic*, judgments.

Analytic judgments express nothing in the predicate but what has been already actually thought in the concept of the subject, though not so clearly and with the same consciousness. If I say: "All bodies are extended," I have not amplified in the least my concept of body, but have only analyzed it, as extension was really thought to belong to that concept before the judgment was made, though it was not expressed; this judgment is therefore analytic. On the other hand, this judgment, "Some bodies have weight," contains in its predicate something not actually thought in the universal concept of body; it amplifies my knowledge by adding something to my concept, and must therefore be called synthetic.

b. *The Common Principle of all Analytic Judgments is that of Contradiction.*—All analytic judgments depend wholly on the principle of contradiction, and are in their nature *a priori* cognitions, whether the concepts that supply them with matter be empirical or not. For the predicate of an affirmative analytic judgment is already thought in the concept of the subject, of which it cannot be denied without contradiction. In the same way its opposite is necessarily denied of the subject in an analytic, but negative, judgment, by the same principle of contradiction. Such is the case of the judgments: "All bodies are extended," and "No bodies are unextended (i.e., simple)."

For this very reason all analytic judgments are *a priori* even when the concepts are empirical, as, for example, "Gold is a yellow metal"; for to know this I require no experience beyond my concept of gold, which contained the thought that this body is yellow and metal. It is, in fact, this thought that constituted my

concept; and I need only analyze it, without looking beyond it elsewhere.

c. *Synthetic Judgments Require a Different Principle from that of Contradiction.*—There are synthetic *a posteriori* judgments of empirical origin; but there are also others which are certain *a priori*, and which spring from pure understanding and reason. Yet they both agree in this, that they cannot possibly spring from the principle of analysis, namely, the principle of contradiction, alone, but require another quite different principle. But whatever principle they may be deduced from, they must be subject to the principle of contradiction, which must never be violated, even though everything cannot be deduced from it. I shall first classify synthetic judgments.

1. *Judgments of Experience* are always synthetic. For it would be absurd to base an analytic judgment on experience, as our concept suffices for the purpose without requiring any testimony from experience. That a body is extended is a judgment which holds *a priori*, and is not a judgment of experience. For before appealing to experience, we already have all the conditions for the judgment in the concept, from which we have then but to elicit the predicate according to the principle of contradiction, and thereby to become conscious of the necessity of the judgment, which experience could not at all teach us.

2. *Mathematical Judgments* are all synthetic. This fact seems hitherto to have altogether escaped the observation of those who have analyzed human reason; it even seems directly opposed to all their conjectures, though it is incontestably certain and most important in its consequences. For as it was found that the conclusions of mathematicians all proceed according to the principle of contradiction (as is demanded by all apodeictic certainty), men persuaded themselves that the fundamental propositions were known from the principle of contradiction. This was a great mistake, for a synthetic proposition can indeed be comprehended according to the principle of contradiction, but only by presupposing another synthetic proposition from which it follows, but never in and by itself.

First of all, we must observe that properly mathematical propositions are always judgments *a priori*, and not empirical, because they carry with them necessity, which cannot be obtained

he can't
do this!

267

268

from experience. But if this be not conceded to me, very well; I shall confine my assertion to *pure mathematics*, the very concept of which implies that it contains pure *a priori* and not empirical cognition.

It might at first be thought that the proposition $7 + 5 = 12$ is a mere analytic judgment, following from the concept of the sum of seven and five, according to the principle of contradiction. But on closer examination it appears that the concept of the sum of $7 + 5$ contains merely their union in a single number, without its being at all thought what the particular number is that unites them. The concept of twelve is by no means thought by merely thinking of the combination of seven and five; and, analyze this possible sum as we may, we shall not discover twelve in the concept. We must go beyond these concepts by calling to our aid some intuition corresponding to one of them, i.e., either our five fingers or five points (as Segner⁴ has it in his *Arithmetic*); and we must add successively the units of the five given in the intuition to the concept of seven. Hence our concept is really amplified by the proposition $7 + 5 = 12$, and we add to the first concept a second one not thought in it. Arithmetical judgments are therefore synthetic, and the more plainly according as we take larger numbers; for in such cases it is clear that, however closely we analyze our concepts without calling intuition to our aid, we can never find the sum by such mere analysis.

Any principle of pure geometry is no less synthetic. That a straight line is the shortest path between two points is a synthetic proposition. For my concept of straight contains nothing of quantity, but only a quality. The concept of the shortest is therefore altogether additional and cannot be obtained by any analysis of the concept of the straight line. Here, too, intuition must come to aid us. It alone makes the synthesis possible.

(Some other principles, assumed by geometers, are indeed actually analytic and depend on the principle of contradiction; but they only serve, as identical propositions, as a method of concatenation, and not as principles, e.g., $a = a$, the whole is equal to itself, or $a + b > a$, the whole is greater than its part. And yet even these, though they are recognized as valid from mere con-

4. [J. A. Segner: *Elementa Arithmeticae et Geometriae*, Göttingen, 1739.]

cepts, are only admitted in mathematics because they can be presented in some intuition.)

What actually makes us believe that the predicate of such apodeictic judgments is already contained in our concept, and that the judgment is therefore analytic, is the duplicity of the expression. We must think a certain predicate as joined to a given concept, and this necessity inheres in the concepts themselves. But the question is not what we must join in thought to the given concept, but what we actually think together with and in it, though obscurely; and so it is manifest that the predicate belongs to this concept necessarily indeed, yet not directly but indirectly by means of a necessarily present intuition.⁵

The essential and distinguishing feature of pure mathematical cognition among all other *a priori* cognitions is that it cannot at all proceed from concepts, but only by means of the construction of concepts (see *Critique of Pure Reason*, "Methodology", Chap. I, Sect. 1). As therefore in its judgments it must proceed beyond the concept to that which its corresponding intuition contains, these judgments neither can, nor ought to arise analytically, by dissecting the concept, but are all synthetic.

I cannot refrain from pointing out the disadvantage resulting to philosophy from the neglect of this easy and apparently insignificant observation. Hume, feeling the call (which is worthy of a philosopher) to cast his eye over the whole field of *a priori* cognitions in which human understanding claims such mighty possessions, heedlessly severed from it a whole, and indeed its most valuable province, viz., pure mathematics. For he imagined that its nature, or, so to speak, the constitution of this province, depended on totally different principles, namely, on the principle of contradiction alone, and although he did not divide judgments in this manner formally and universally and did not use the same terminology as I have done here, what he said was equivalent to this: that pure mathematics contains only analytic, but metaphysics synthetic, *a priori* judgments. In this, however, he was greatly mistaken, and the mistake had a decidedly in-

5. [In the next several pages the order of the German text as it appears in the *Philosophische Bibliothek* Edition of Kant's *Works* is followed rather than the *Akademie* Edition.]

273

jurious effect upon his whole conception. But for this, he would have extended his question concerning the origin of our synthetic judgments far beyond the metaphysical concept of causality and included in it the possibility of mathematics *a priori* also; for this latter he must have assumed to be equally synthetic. And then he could not have based his metaphysical judgments on mere experience without subjecting the axioms of mathematics equally to experience, a thing which he was far too acute to do. The good company into which metaphysics would thus have been brought would have saved it from the danger of a contemptuous ill-treatment; for the thrust intended for it must have reached mathematics, which was not and could not have been Hume's intention. Thus that acute man would have been led into considerations which must needs be similar to those that now occupy us, but which would have gained inestimably from his inimitably elegant style.

[3.] *Metaphysical Judgments*, properly so-called, are all synthetic. We must distinguish judgments belonging to metaphysics from metaphysical judgments properly so-called. Many of the former are analytic, but they only afford the means to metaphysical judgments, which are the whole aim of the science and which are always synthetic. For if there be concepts belonging to metaphysics (as, for example, that of substance), the judgments springing from simple analysis of them also belong to metaphysics, as, for example, substance is that which only exists as subject, etc. By means of several such analytic judgments we seek to arrive at the definition of a concept. But as the analysis of a pure concept of the understanding (such as metaphysics contains) does not proceed in any different manner from the dissection of any other, even empirical, concepts, not belonging to metaphysics (such as, air is an elastic fluid, the elasticity of which is not destroyed by any known degree of cold), it follows that the concept indeed, but not the analytic judgment, is properly metaphysical. This science has something special and peculiar to itself in the production of its *a priori* cognitions, which must therefore be distinguished from the features it has in common with other rational knowledge. Thus the judgment that all the substance in things is permanent is a synthetic and properly metaphysical judgment.

If the *a priori* concepts which constitute the materials and

274

building blocks of metaphysics have first been collected according to fixed principles, then their analysis will be of great value. It might be taught as a particular part (as a *philosophia definitiva*), containing nothing but analytic judgments pertaining to metaphysics, and could be treated separately from the synthetic, which constitute metaphysics proper. For indeed these analyses are not elsewhere of much value except in metaphysics, i.e., as regards the synthetic judgments which are to be generated out of these previously analyzed concepts.

The conclusion drawn in this section then is that metaphysics is properly concerned with synthetic propositions *a priori*, and these alone constitute its end, for which it indeed requires various dissections of its concepts, viz., analytic judgments, but wherein the procedure is not different from that in every other kind of cognition, in which we merely seek to render our concepts distinct by analysis. But the generation of *a priori* cognition by intuition as well as by concepts, in fine, of synthetic propositions *a priori* in philosophical cognition, constitutes the essential content of metaphysics.

§ 3. A REMARK ON THE GENERAL DIVISION OF JUDGMENTS INTO ANALYTIC AND SYNTHETIC

270

This division is indispensable as concerns the critique of human understanding and therefore deserves to be classical in it, though otherwise it is of little use. But this is the reason why dogmatic philosophers, who always seek the sources of metaphysical judgments in metaphysics itself and not outside of it in the pure laws of reason generally, altogether neglected this apparently obvious distinction. Thus the celebrated Wolff and his acute follower Baumgarten came to seek the proof of the principle of sufficient reason, which is clearly synthetic, in the principle of contradiction. In Locke's *Essay*, however, I find an indication of my division. For in the fourth book (chap. iii., § 9, seq.), having discussed the various connections of representations in judgments, and their sources, one of which he makes "identity or contradiction" (analytic judgments) and another the coexistence of representations in a subject (synthetic judgments), he confesses (§10) that our (*a priori*) knowledge of the latter is very narrow