Prolegomena to Any Future Metaphysics [Selection]
Immanuel Kant

PREAMBLE ON THE PECULIARITIES OF ALL METAPHYSICAL KNOWLEDGE

Sect. 1:
Of the Sources of Metaphysics

If it becomes desirable to formulate any cognition as science, it will be necessary first to determine accurately those peculiar features which no other science has in common with it, constituting its characteristics; otherwise the boundaries of all sciences become confused, and none of them can be treated thoroughly according to its nature.

The characteristics 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 this, 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 maxims but its basic notions) must never be derived from experience. It must not be physical but metaphysical knowledge, viz., 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 knowledge, coming from pure Understanding and pure Reason.

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 the Pure Reason (II. “Method of Transcendentalism,” Chap. I., Sec. 1), where the distinction between these two employments of the reason is sufficiently explained. So far concerning the sources of metaphysical cognition.

Sect. 2.
Concerning the Kind of Cognition which can alone be called Metaphysical

a. Of the Distinction between Analytical and Synthetical 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 expansive, increasing the given cognition: the former may be called analytical, the latter synthetical, judgments.

Analytical judgments express nothing in the predicate but what has been already actually thought in the concept of the subject, though not so distinctly or with the same (full) consciousness. When 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 analytical. On the contrary, this judgment, All bodies have weight, contains in its predicate something not actually thought in the general concept of the body; it amplifies my knowledge by adding something to my concept, and must therefore be called synthetical.

b. The Common Principle of all Analytical Judgments is the Law of Contradiction. All analytical judgments depend wholly on the law 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 analytical judgment is already contained 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 analytical, but negative, judgment, by the same law of contradiction. Such is the nature of the judgments: all bodies are extended, and no bodies are unextended (i.e., simple).

For this very reason all analytical 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 as a yellow metal: it is, in fact, the very concept, and I need only analyze it, without looking beyond it elsewhere.

c. Synthetical judgments require a different Principle from the Law of Contradiction. There are synthetical a posteriori judgments of empirical origin; but there are also others which are proved to be 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, viz., the law of contradiction, alone; they require a quite different principle, though, from whatever they may be deduced, they must be subject to the law of contradiction, which must never be violated, even though everything cannot be deduced from it. I shall first classify synthetical judgments.

1. Empirical judgments are always synthetical. For it would be absurd to base an analytical judgment on experience, as our concept suffices for the purpose without requiring any testimony from experience. That body is extended, is a judgment established a priori, and not an empirical judgment. For before appealing to experience, we already have all the conditions of the judgment in the concept, from which we have but to elicit the predicate according to the law of contradiction, and thereby to become conscious of the necessity of the judgment, which experience could not even teach us.

2. Mathematical judgments are all synthetical. 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 incontestably certain, and most important in its consequences. For as it was found that the conclusions of mathematicians all proceed according to the law of contradiction (as is demanded by all apodictic certainty), men persuaded themselves that the fundamental principles were known from the same law. This was a great mistake, for a synthetical proposition can indeed be comprehended according to the law of contradiction, but only by presupposing another synthetical proposition from which it follows, but never in itself.

First of all, we must observe that all proper mathematical judgments are a priori, and not empirical, because they carry with them necessity, which cannot be obtained from experience. But if this be not conceded to me, very good; I shall confine my assertion pure Mathematics, the very notion of which implies that it contains pure a priori and not empirical cognitions. It might at first be thought that the proposition $7 + 5 = 12$ is a mere analytical judgment, following from the concept of the sum of seven and five, according to the law 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 concrete image, i.e., either our five fingers, or five points (as Segner has it in his Arithmetic), and we must add successively the units of the five, given in some concrete image, to the concept of seven. Hence our concept is really amplified by the proposition $7 + 5 = 12$, and we add to the first a second, not thought in it. Arithmetical judgments are therefore synthetical, and the more
According as we take larger numbers; for in such cases it is clear that, however closely we analyze our concepts without calling visual images to our aid, we can never find the sum by such mere dissection.

All principles of geometry are no less analytical. That a straight line is the shortest path between two points, is a synthetical proposition. For my concept of straight contains nothing of quantity, but only a quality. The attribute of shortness is therefore altogether additional, and cannot be obtained by any analysis of the concept. Here, too, visualization must come to aid us. It alone makes the synthesis possible.

Some other principles, assumed by geometers, are indeed actually analytical, and depend on the law 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 concepts, are only admitted in mathematics, because they can be represented in some visual form [Anschauung]. What usually makes us believe that the predicate of such apodictic5 judgments is already contained in our concept, and that the judgment is therefore analytical, is the duplicity of the expression, requesting us to think a certain predicate as of necessity implied in the thought of a given concept, which necessity attaches to the concept. But the question is not what we are requested to join in thought to the given concept, but what we actually think together with and in it, though obscurely; and so it appears that the predicate belongs to these concepts necessarily indeed, yet not directly but indirectly by an added visualization.

SOLUTION OF THE GENERAL QUESTION OF THE PROLEGOMENA

How is Metaphysics as a Science Possible?

Metaphysics, as a natural disposition of reason, is actual, but if considered by itself alone (as the analytical solution of the third principal question showed), dialectical and illusory. If we think of taking principles from it, and in using them follow the natural, but on that account not less false, illusion, we can never produce science, but only a vain dialectical art, in which one school may outdo another, but none can ever acquire a just and lasting approbation.

In order that as a science metaphysics may be entitled to claim not mere fallacious plausibility, but insight and conviction, a Critique of Reason must itself exhibit the whole stock of a priori concepts, their division according to their various sources (Sensibility, Understanding, and Reason), together with a complete table of them, the analysis of all these concepts, with all their consequences, especially by means of the deduction of these concepts, the possibility of synthetical cognition a priori, the principles of its application and finally its bounds, all in a complete system. Critique, therefore, and critique alone, contains in itself the whole well-proved and well-tested plan, and even all the means required to accomplish metaphysics, as a science; by other ways and means it is impossible. The question here therefore is not so much how this performance is possible, as how to set it going, and induce men of clear heads to quit their hitherto perverted and fruitless cultivation for one that will not deceive, and how such a union for the common end may best be directed.

This much is certain, that whoever has once tasted critique will be ever after disgusted with all dogmatical twaddle which be formerly put up with, because his reason must have something, and could find nothing better for its support. Critique stands in the same relation to the common metaphysics of the schools, as chemistry does to alchemy, or as astronomy to the astrology of the fortune-teller. I pledge myself that nobody who has read through and through, and grasped the principles of critique, even in these Prolegomena only, will ever return to that old and sophistical pseudo-science; but will rather with a certain delight look forward to
metaphysics which is now indeed in his power, requiring no more preparatory discoveries, and
now at last affording permanent satisfaction to reason. For here is an advantage upon which,
of all possible sciences, metaphysics alone can with certainty reckon: that it can be brought
to such completion and fixity as to be incapable of further change, or of any augmentation by
new discoveries; because here reason has the sources of its knowledge in itself, not in objects
and their observation [Anschauung], by which latter its stock of knowledge cannot be further
increased. When therefore it has exhibited the fundamental laws of its faculty completely
and so definitely as to avoid all misunderstanding, there remains nothing for pure reason to
know a priori, nay, there is even no ground to raise further questions. The sure prospect of
knowledge so definite and so compact has a peculiar charm, even though we should set aside
all its advantages, of which I shall hereafter speak.

All false art, all vain wisdom, lasts its time, but finally destroys itself, and its highest culture
is also the epoch of its decay. That this time is come for metaphysics appears from the state into
which it has fallen among all learned nations, despite of all the zeal with which other sciences
of every kind are prosecuted. The old arrangement of our university studies still preserves its
shadow; now and then an Academy of Science tempts men by offering prizes to write essays
on it, but it is no longer numbered among thorough sciences; and let any one judge for himself
how a man of genius, if he were called a great metaphysician, would receive the compliment,
which may be well- meant, but is scarce envied by anybody.

Yet, though the period of the downfall of all dogmatical metaphysics has undoubtedly
arrived, we are yet far from being able to say that the period of its regeneration is come by
means of a thorough and complete Critique of Reason. All transitions from a tendency to its
contrary pass through the stage of indifference, and this moment is the most dangerous for an
author, but, in my opinion, the most favorable for the science. For, when party spirit has died
out by a total dissolution of former connections, minds are in the best state to listen to several
proposals for an organization according to a new plan.

When I say, that I hope these Prolegomena will excite investigation in the field of critique
and afford a new and promising object to sustain the general spirit of philosophy, which seems
on its speculative side to want sustenance, I can imagine beforehand, that every one, whom the
thorny paths of my Critique have tired and put out of humor, will ask me, upon what I found
this hope. My answer is: upon the irresistible law of necessity.

That the human mind will ever give up metaphysical researches is as little to be expected
as that we should prefer to give up breathing altogether, to avoid inhaling impure air. There
will therefore always be metaphysics in the world; nay, every one, especially every man of
reflection, will have it, and for want of a recognized standard, will shape it for himself after his
own pattern. What has hitherto been called metaphysics, cannot satisfy any critical mind, but to
forego it entirely is impossible; therefore a critique of pure reason itself must now be attempted
or, if one exists, investigated, and brought to the full test, because there is no other means of
supplying this pressing want, which is something more than mere thirst for knowledge.

Ever since I have come to know critique, whenever I finish reading a book of metaphysical
contents, which, by the preciseness of its notions, by variety, order, and an easy style, was
not only entertaining but also helpful, I cannot help asking, “Has this author indeed advanced
metaphysics a single step?” The learned men, whose works have been useful to me in other
respects and always contributed to the culture of my mental powers, will, I hope, forgive me
for saying, that I have never been able to find either their essays or my own less important ones
(though self-love may recommend them to me) to have advanced the science of metaphysics
in the least, and why? Here is the very obvious reason: metaphysics did not then exist as a
science, nor can it be gathered piecemeal, but its germ must be fully preformed in the Critique.
But in order to prevent all misconception, we must remember what has been already said, that
by the analytical treatment of our concepts the understanding gains indeed a great deal, but
the science (of metaphysics) is thereby not in the least advanced, because these dissections of
concepts are nothing but the materials from which the intention is to carpenter our science. Let
the concepts of substance and of accident be ever so well dissected and determined, all this is

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very well as a preparation for some future use. But if we cannot prove, that in all which exists the substance endures, and only the accidents vary, our science is not the least advanced by all our analyzes. Metaphysics has hitherto never been able to prove a priori either this proposition, or that of sufficient reason, still less any more complex theorem, such as belongs to psychology or cosmology, or indeed any synthetical proposition. By all its analyzing therefore nothing is affected, nothing obtained or forwarded and the science, after all this bustle and noise, still remains as it was in the days of Aristotle, though far better preparations were made for it than of old, if the clue to synthetical cognitions had only been discovered.

If any one thinks himself offended, he is at liberty to refute my charge by producing a single synthetical proposition belonging to metaphysics, which he would prove dogmatically a priori, for until he has actually performed this feat, I shall not grant that he has truly advanced the science; even should this proposition be sufficiently confirmed by common experience. No demand can be more moderate or more equitable, and in the (inevitably certain) event of its non-performance, no assertion more just, than that hitherto metaphysics has never existed as a science.

But there are two things which, in case the challenge be accepted, I must depurate: first, trifling about probability and conjecture, which are suited as little to metaphysics, as to geometry; and secondly, a decision by means of the magic wand of common sense, which does not convince every one, but which accommodates itself to personal peculiarities.

For as to the former, nothing can be more absurd, than in metaphysics, a philosophy from pure reason to think of grounding our judgments upon probability and conjecture. Everything that is to be cognized a priori is thereby announced as apodeictically certain, and must therefore be proved in this way. We might as well think of grounding geometry or arithmetic upon conjectures. As to the doctrine of chances in the latter, it does not contain probable, but perfectly certain, judgments concerning the degree of the probability of certain cases, under given uniform conditions, which, in the sum of all possible cases, infallibly happen according to the rule, though it is not sufficiently determined in respect to every single chance. Conjectures (by means of induction and of analogy) can be suffered in an empirical science of nature only, yet even there the possibility at least of what we assume must be quite certain.

The appeal to common sense is even more absurd, when concept and principles are announced as valid, not in so far as they hold with regard to experience, but even beyond the conditions of experience. For what is common sense? It is normal good sense, so far it judges right. But what is normal good sense? It is the faculty of the knowledge and use of rules in concreto, as distinguished from the speculative understanding, which is a faculty of knowing rules in abstracto. Common sense can hardly understand the rule, that every event is determined by means of its cause, and can never comprehend it thus generally. It therefore demands an example from experience, and when it hears that this rule means nothing but what it always thought when a pane was broken or a kitchen-utensil missing, it then understands the principle and grants it. Common sense therefore is only of use so far as it can see its rules (though they actually are a priori) confirmed by experience; consequently to comprehend them a priori, or independently of experience, belongs to the speculative understanding, and lies quite beyond the horizon of common sense. But the province of metaphysics is entirely confined to the latter kind of knowledge, and it is certainly a bad index of common sense to appeal to it as a witness, for it cannot here form any opinion whatever, and men look down upon it with contempt until they are in trouble and can find in their speculation neither advice nor help.

It is a common subterfuge of those false friends of common sense (who occasionally prize it highly, but usually despise it) to say, that there must surely be at all events some propositions which are immediately certain, and of which there is no occasion to give any proof, or even any account at all, because we otherwise could never stop inquiring into the grounds of our judgments. But if we except the principle of contradiction, which is not sufficient to show the truth of synthetical judgments, they can never adduce, in proof of this privilege, anything else indubitable, which they can immediately ascribe to common sense, except mathematical propositions, such as twice two make four, between two points there is but one straight line,
etc. But these judgments are radically different from those of metaphysics. For in mathematics I myself can, by thinking, construct whatever I represent to myself as possible by a concept: I add to the first two the other two, one by one, and myself make the number four, or I draw in thought from one point to another all manner of lines, equal as well as unequal; yet I can draw one only, which is like itself in all its parts. But I cannot, by all my power of thinking, extract from the concept of a thing the concept of something else, whose existence is necessarily connected with the former, but I must call in experience. And though my understanding furnishes me a priori (yet only in reference to possible experience) with the concept of such a connection (i.e., causation), I cannot exhibit it a priori in intuition, like the concepts of mathematics, and so show its possibility a priori. This concept, together with the principles of its application, always requires, if it is to hold a priori—as is requisite in metaphysics—a justification and deduction of its possibility, because we cannot otherwise know how far it holds good, and whether it can be used in experience only or beyond it also.

Therefore in metaphysics, as a speculative science of pure reason, we can never appeal to common sense, but may do so only when we are forced to surrender it, and to renounce all purely speculative cognition, which must always be knowledge, and consequently when we forego metaphysics itself and its instruction, for the sake of adopting a rational faith which alone may be possible for us, and sufficient to our wants, perhaps even more salutary than knowledge itself. For in this case the attitude of the question is quite altered. Metaphysics must be science, not only as a whole, but in all its parts, otherwise it is nothing: because, as a speculation of pure reason, it finds a hold only on general opinions. Beyond its field, however, probability and common sense may be used with advantage and justly, but on quite special principles, of which the importance always depends on the reference to practical life.

This is what I hold myself justified in requiring for the possibility of metaphysics as a science.


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