

*Inquiry concerning the distinctness of the
principles of natural theology and morality*

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Untersuchung

über die

Deutlichkeit der Grundsätze

der

natürlichen Theologie und der Moral.

*Being an answer to the question
proposed for consideration by the
Berlin Royal Academy of Sciences
for the year 1763*

*Verum animo satis haec vestigia parva sagaci
Sunt, per quae possis cognoscere caetera tute.¹*

Zur
Beantwortung der Frage,

welche die

Königl. Akademie der Wissenschaften zu Berlin
auf das Jahr 1763
aufgegeben hat.

*Verum animo satis haec vestigia parva sagaci
Sunt, per quae possis cognoscere caetera tute.*

The question proposed for consideration is such that, if it is appropriately answered, higher philosophy must as a result acquire a determinate form. If the method for attaining the highest possible degree of certainty in this type of cognition has been established, and if the nature of this kind of conviction^a has been properly understood, then the following effect will be produced: the endless instability of opinions and scholarly sects^b will be replaced by an immutable rule which will govern didactic method^c and unite reflective minds in a single effort. It was in this way that, in natural science, *Newton's* method transformed the chaos of physical hypotheses into a secure procedure based on experience and geometry.² But what method is this treatise itself to adopt, granted that it is a treatise in which metaphysics is to be shown the true degree of certainty to which it may aspire, as well as the path by which the certainty may be attained? If what is presented in this treatise is itself metaphysics, then the judgement of the treatise will be no more certain than has been that science which hopes to benefit from our inquiry by acquiring some permanence and stability;^d and then all our efforts will have been in vain. I shall, therefore, ensure that my treatise contains nothing but empirical propositions which are certain,^e and the inferences which are drawn immediately from them. I shall rely neither on the doctrines of the philosophers, the uncertainty of which is the very occasion of this present inquiry, nor on definitions,^f which so often lead to error.^g The method I shall employ will be simple and cautious. Some of the things I shall have to say may be found to be lacking in certainty; but such things will only have an elucidatory function and will not be employed for purposes of proof.

^a Überzeugung. ^b Schulsecten.

^c *Lehrart* / Beck (1949) (hereafter B): method of instruction. / Carabellse (Assunto) (hereafter C): *norma doctrinaria* / Ferrari (hereafter Fe): *méthode d'enseignement* / Fichant (hereafter Fi): *mode de connaissance* (*Lehrart*).

^d *einigen Bestand und Festigkeit*. ^e *sichere Erfahrungssätze*. / *Definitionen*. ^f *trüben*.

*First reflection: General comparison of the
manner in which certainty is attained in
mathematical cognition with the manner in
which certainty is attained in philosophical
cognition*

§ I. MATHEMATICS ARRIVES AT ALL ITS
DEFINITIONS⁶ SYNTHETICALLY, WHEREAS
PHILOSOPHY ARRIVES AT ITS DEFINITIONS
ANALYTICALLY³

There are two ways in which one can arrive at a general concept: either by the *arbitrary combination*¹ of concepts, or by *separating out*² that cognition which has been rendered distinct by means of analysis.^{3,4} Mathematics only ever draws up its definitions in the first way. For example, think arbitrarily⁵ of four straight lines bounding a plane surface so that the opposite sides are not parallel to each other. Let this figure be called a *trapezium*. The concept which I am defining⁶ is not given prior to the definition⁷ itself; on the contrary, it only comes into existence as a result of that definition. Whatever the concept of a cone may ordinarily signify, in mathematics the concept is the product of the arbitrary representation⁸ of a right-angled triangle which is rotated on one of its sides. In this and in all other cases the definition⁹ obviously comes into being as a result of *synthesis*.¹⁰

The situation is entirely different in the case of philosophical definitions. In philosophy, the concept of a thing is always given, albeit confusedly or in an insufficiently determinate fashion. The concept has to be

⁶ Definitionen. ¹ willkürliche Verbindung.

² Absonderung von / B: setting apart / C: isolando / Fe & Ft: abstraction à partir de / Walford (hereafter W): separation from.

³ durch Absonderung von denjenigen / (the sentence is ambiguous because of the ambiguity of the von [either 'from' or 'of']).

⁴ willkürlich. ⁵ erkläre. ⁶ Definition. ⁷ aus der willkürlichen Vorstellung.

⁸ Erklärung / B: definition / C: spiegazione / Fe & Ft: definition / W: explanation.

⁹ durch die Synthesis.

analysed;⁷ the characteristic marks which have been separated out⁸ and the concept which has been given have to be compared with each other in all kinds of contexts; and this abstract thought⁹ must be rendered complete¹⁰ and determinate. For example, everyone has a concept of time. But suppose that that concept has to be defined.¹¹ The idea of time has to be examined in all kinds of relation if its characteristic marks are to be discovered by means of analysis.¹² Different characteristic marks which have been abstracted have to be combined together to see whether they yield an adequate concept;¹³ they have to be collated with each other¹⁴ to see whether one characteristic mark does not partly include another within itself. If, in this case, I had tried to arrive at a definition of time synthetically, it would have had to have been a happy coincidence indeed if the concept, thus reached synthetically, had been exactly the same as that which completely expresses the idea¹⁵ of time which is given to us.⁸

Nonetheless, it will be said, philosophers sometimes offer synthetic definitions as well, and mathematicians on occasion offer definitions which are analytic. A case in point would be that of a philosopher arbitrarily¹⁶ thinking of a substance endowed with the faculty of reason and calling it a spirit.¹⁷ My reply, however, is this: such determinations of the meaning of a word are never philosophical definitions. If they are to be called definitions¹⁸ at all, then they are merely grammatical definitions. For no philosophy is needed to say what name is to be attached to an arbitrary concept.¹⁹ Leibniz imagined a simple substance which had nothing but obscure representations,²⁰ and he called it a *slumbering monad*.¹⁰ But, in doing so, he did not define²¹ the monad. He merely invented²² it, for the concept of a monad was not given to him but created by him. Mathematicians, on the other hand, it must be admitted, sometimes have offered analytic definitions.²³ But it must also be said that for them to do so is always a mistake. It was in this way that Wolff considered similarity in geometry: he looked at it with a philosophical eye, with a view to subsuming the geometrical concept of similarity under the general concept.¹¹ But he could have spared himself the trouble. If I think of figures, in which the angles enclosed by the lines of the perimeter are equal to each other, and in which the sides enclosing those angles stand in identical relations to each other²⁴ — such a figure could always be regarded as the definition of similarity between figures, and likewise with the other similarities between spaces. The general definition of similarity is of no concern whatever to the geometer.¹² It is fortunate for mathematics that, even though the

⁷ zergliedern. ⁸ die abgesonderte Merkmale. ⁹ abstracten Gedanken. ¹⁰ ausführlich.

¹¹ erklärt. ¹² Zergliederung. ¹³ einen zureichenden Begriff. ¹⁴ unter einander zusammengehalten.

¹⁵ Idee. ¹⁶ willkürlicher Weise. ¹⁷ Geist. ¹⁸ Erklärungen. ¹⁹ einem willkürlichen Begriff.

²⁰ dunkle Vorstellungen. ²¹ erklärt. ²² erdacht. ²³ analytisch erklärt.

²⁴ dem wenn ich mir Figuren denke, in welchen die Winkel, die die Linien des Umkreises einschliessen, gegenseitig gleich sind, und die Seiten, die sie einschliessen einerlei Verhältnis haben.

§3. IN MATHEMATICS, UNANALYSABLE
CONCEPTS AND INDEMONSTRABLE
PROPOSITIONS ARE FEW IN NUMBER, WHEREAS
IN PHILOSOPHY THEY ARE INNUMERABLE

The concepts of magnitude^a in general, of unity, of plurality,⁷ of space, and so on, are, at least in mathematics, unanalysable.^z That is to say, their analysis^c and definition^b do not belong to this science at all. I am well aware of the fact that geometers often confuse the boundaries between the different sciences, and on occasion wish to engage in philosophical speculation in mathematics. Thus, they seek to define^c concepts such as those just mentioned, although the definition in such a case has no mathematical consequences at all. But this much is certain: any concept is unanalysable with respect to a given discipline if, irrespective of whether or not it be definable^d elsewhere, it need not be defined, not, at any rate, in this discipline. And I have said that concepts are rare in mathematics. I shall go still further and deny that, strictly speaking, any such concepts at all can occur in mathematics; by which I mean that their definition by means of conceptual analysis^e does not belong to mathematical cognition – assuming, that is, that it is actually possible elsewhere. For mathematics never defines^f a given concept by means of analysis; it rather defines an object by means of arbitrary combination;^g and the thought of that object first becomes possible in virtue of that arbitrary combination.

If one compares philosophy with this, what a difference becomes apparent. In all its disciplines, and particularly in metaphysics, every analysis which can occur is actually necessary, for both the distinctness of the cognition and the possibility of valid inferences^h depend upon such analysis. But it is obvious from the start that the analysis will inevitably lead to concepts which are unanalysable.²⁰ These unanalysable concepts will be unanalysable either in and for themselves or relatively to us. It is further evident that there will be uncommonly many such unanalysable concepts, for it is impossible that universal cognition of such great complexity should be constructed from only a few fundamental concepts. For this reason, there are many concepts which are scarcely capable of analysis at all; for example, the concept of a *representation*, the concepts of *being new* to each other and *being after each other*. Other concepts can only be partially analysed, for example, the concepts of *space*, *time* and the many different feelings of the human soul, such as the feeling of the *sublime*, the *beautiful*, the *disgusting*,ⁱ and so forth. Without exact knowledge^k and analysis of

^a Grösse. ⁷ Menge / B & W: quantity / C: *quantità* / Fe & Fi: *multiplicité*. ^z unauflöslich.
^c Zergliederung. ^b Erklärung. ^e erklären. ^d können erklärt werden.
^f ihre Erklärung durch Zergliederung der Begriffe. ^g erklärt. ^h durch willkürliche Verbindung,
ⁱ sowohl die Deutlichkeit der Erkenntnis als die Möglichkeit sicherer Folgerungen.
^k betraue gar nicht aufgelöst werden können. ^j des Ekelhaften. ^l Kenntniss.

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these concepts, the springs of our nature will not be sufficiently understood; and yet, in the case of these concepts, a careful observer will notice that the analyses are far from satisfactory. I admit that the definitions¹ of pleasure and displeasure,^m of desire and aversion, and of numberless other such concepts, have never been furnished by means of adequate analyses. Nor am I surprised by this unanalysability. For concepts which are as diverse in character as this must presumably be based upon different elementary concepts. The error, committed by some, of treating all such cognitions as if they could be completely analysed into a few simple concepts is like the error into which the early physicists fell. They were guilty, namely, of the mistake of supposing that all the matter of which nature is constituted consists of the so-called four elements – a view which has been discredited by more careful observation.

Furthermore, there are only a few fundamental *indemonstrable propositions* in mathematics. And even if they admit of proof elsewhere, they are nonetheless regarded as immediately certain in this science. Examples of such propositions are: *the whole is equal to all its parts taken together; there can only be one straight line between two points*, and so forth. Mathematicians are accustomed to setting up such principles at the beginning of their inquiries² so that it is clear that these are the only obvious propositions which are immediately presupposed as true, and that all other propositions are subject to strict proof.

If a comparison were to be made between this and philosophy, and, in particular between this and metaphysics, I should like to see drawn up a table of the indemonstrable propositions which lie at the foundation of these sciences throughout their whole extent.^o Such a table would constitute a scheme of immeasurable scope.^p But the most important business of higher philosophy consists in seeking out these indemonstrable fundamental truths; and the discovery of such truths will never cease as long as cognition of such a kind as this continues to grow. For, no matter what the object may be, those characteristic marks, which the understanding initially and immediately perceives in the object, constitute the *data* for exactly the same number of indemonstrable propositions, which then form the foundation on the basis of which definitions can then be drawn up.^q Before I set about the task of defining^r what space is,²¹ I clearly see

¹ Erklärungen. ^m Unlust. ⁿ Disziplinen. ^o durch ihre ganze Strecke zum Grunde liegen.
^p einen Plan ausmachen, der unermesslich wäre.

^q moras die Definitionen können erfunden werden / B: on which definitions can be established
/ C: die constituiscono anche la base dalla quale si possono ricavare le definizioni / Fe & Fi: à partir
desquels les définitions peuvent être trouvées / W: the foundation from which definitions can be
drawn up / (grammatically, moras should relate to *Grundlage* ['foundation'], but that would
make little sense logically; perhaps it should be construed as referring to the indemonstrable
propositions).
^r erklären.

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seek out those characteristic marks which are initially and immediately thought in that concept. Adopting this approach, I notice that there is a manifold in space of which the parts are external to each other.¹ I notice that this manifold² is not constituted by substances, for the cognition I wish to acquire relates not to things in space but to space itself;^{3,22} and I notice that space can only have three dimensions *etc.* Propositions such as these can well be explained if they are examined *in concreto* so that they come to be cognised intuitively; but they can never be proved. For on what basis could such a proof be constructed, granted that these propositions constitute the first and the simplest thoughts I can have of my object, when I first call it²⁴ to mind? In mathematics, the definitions are the first thought which I can entertain of the thing defined,²⁵ for my concept of the object only comes into existence as a result of the definition.²⁶ It is, therefore, absolutely absurd to regard the definitions as capable of proof. In philosophy, where the concept of the thing to be defined²⁷ is given to me, that which is initially and immediately perceived in it must serve as an indemonstrable fundamental judgement.²⁸ For since I do not yet possess a complete and distinct concept of the thing, but am only now beginning to look for such a concept, it follows that the fundamental judgement cannot be proved by reference to this concept. On the contrary, such a judgement serves to generate this distinct cognition and to produce the definition sought.²⁹ Thus, I shall have to be in possession of these primary fundamental judgements prior to any philosophical definition of the things under examination. And here the only error which can occur beforehand is that of mistaking a derivative characteristic mark for one which is primary and fundamental.³⁰ The following reflection will contain some considerations which will put this claim beyond doubt.

¹ *dass darin vieles ausserhalb einander sei.* ² *dieses Viele.*
³ *ihn* (must refer to *der Raum* [space] and not to *meinem Objekte* [my object] because it is neuter).
⁴ *von dem erklärten Dinge.* ⁵ *durch die Erklärung.* ⁶ *die ich erklären soll.* ⁷ *Grundurtheile.*
⁸ *In der Mätheisheit, wo mir der Begriff der Sache, die ich erklären soll, gegeben ist, muss dasjenige, was unmittelbar und zuerst in ihm wahrgenommen wird, zu einem unermesslichen Grundurtheil dienen. Denn da ich den ganzen deutlichen Begriff der Sache noch nicht habe, sondern allererst suche, so kann er aus diesem Begriffe so gar nicht bewiesen werden, dass er vielmehr dazu dient, diese deutliche Erkenntnis und Definition dadurch zu erzeugen. (It is not clear to what the *er* [in the third clause of the second sentence] refers. The only possible antecedent is *Begriff* ['concept'], but that would yield no sense. The only possible candidate would seem to be *Grundurtheil*: admittedly *Urtheil* is neuter, but Kant may have mistakenly supposed that because *Zeit* may be either masculine or neuter, the compound word could be either, as well. This reading, although not grammatically justified, does yield philosophical sense. *Fe* and *Fi* adopt this reading, but without comment.)*
⁹ *ein Urnangliches Merkmal.*

§4. THE OBJECT OF MATHEMATICS IS SIMPLE, WHEREAS THAT OF PHILOSOPHY IS DIFFICULT AND INVOLVED²³

The object of mathematics is magnitude.²⁴ And, in considering magnitude, mathematics is only concerned with how many times something is posited.²⁵ This being the case, it is obvious that this science must be based upon a few, very clear fundamental principles of the general theory of magnitudes²⁶ (which, strictly speaking, is general arithmetic). There, too, one sees the increase and decrease of magnitudes, their reduction to equal factors in the theory of roots – all of them originating from a few simple fundamental concepts. And a few fundamental concepts of space effect the application of this general cognition of magnitudes to geometry. In order to convince oneself of the truth of what I am saying here all one needs to do is contrast, for example, the ease one has in understanding an arithmetical object which contains an immense multiplicity, with the much greater difficulty one experiences in attempting to grasp a philosophical idea, in which one is trying to understand only a little. The relation of a *million* to unity is understood with complete distinctness, whereas even today the philosophers have not yet succeeded in explaining the concept of freedom in terms of its elements,²⁷ that is to say, in terms of the simple and familiar concepts of which it is composed.²⁸ In other words, there are infinitely many qualities which constitute the real object of philosophy, and distinguishing them from each other is an extremely strenuous business. Likewise, it is far more difficult to disentangle²⁹ complex and involved cognitions by means of analysis than it is to combine simple given cognitions by means of synthesis and thus to establish conclusions. I know that there are many people who find philosophy a great deal easier than higher mathematics.³⁰ But what such people understand by philosophy is simply what they find in books which bear that title. The outcome of the two inquiries shows the difference between them. Claims to philosophical cognition generally enjoy the fate of opinions and are like the meteors, the brilliance of which is no guarantee of their endurance. Claims to philosophical cognition vanish, but mathematics endures. Metaphysics is without doubt the most difficult of all the things into which man has insight.³¹ But so far no metaphysics has ever been written. The question posed for consideration by the Royal Academy of Sciences in Berlin shows that there is good reason to ask about the path in which one proposes to search for metaphysical understanding in the first place.³²

²³ *Grösse.* ²⁴ *wie vielmal etwas gesetzt sei.* ²⁵ *Grundlehren der allgemeinen Grössenlehre.*
²⁶ *aus ihren Einheiten.* ²⁷ *aufzulösen.* ²⁸ *höheren Mathesis.*
²⁹ *die schwierigste unter allen menschlichen Einsichten.*

*Second reflection: The only method for
attaining the highest possible degree of
certainty in metaphysics*

Metaphysics is nothing other than the philosophy of the fundamental principles of our cognition. Accordingly, what was established in the preceding reflection about mathematical cognition in comparison with philosophy will also apply to metaphysics. We have seen that the differences which are to be found between cognition in mathematics and cognition in philosophy are substantial and essential.¹ And in this connection, one can say with Bishop *Warburton* that nothing has been more damaging to philosophy than mathematics, and in particular the *imitation* of its method in contexts where it cannot possibly be employed.² The *application* of the mathematical method in those parts of philosophy involving cognition of magnitudes is something quite different, and its utility is immeasurable.³

In mathematics I begin with the definition⁴ of my object, for example, of a triangle, or a circle, or whatever. In metaphysics I may never begin with a definition. Far from being the first thing I know about the object, the definition is nearly always the last thing I come to know. In mathematics, namely, I have no concept of my object at all until it is furnished by the definition. In metaphysics I have a concept which is already given to me, although it is a confused one. My task is to search for the distinct, complete⁵ and determinate concept. How then am I to begin? *Augustine* said: 'I know perfectly well what time is, but if someone asks me what it is I do not know.'⁶ In such a case as this, many operations have to be performed in unfolding obscure ideas, in comparing them with each other, in subordinating them to each other and in limiting them by each other.⁷ And I would go as far as to say that, although much that is true and much that is penetrating has been said about time, nonetheless no real definition^{8,9} has ever been given of time. For, as far as the nominal definition¹⁰ is concerned, it is of little or no use to us, for even without the nominal definition the word is understood well enough not to be misused. If we had as

¹ *nannhafte und wesentliche.* ² *Erklärung.* ³ *ausführlichen.*

⁴ *viel Handlungen der Entwicklung dunkler Ideen, der Vergleichung, Unterordnung mit Einschränkung.*

⁵ *Realerklärung.* ⁶ *Namenerklärung.*

many correct definitions of time as there are definitions to be found in the books devoted to the subject, with what certainty could inferences be made and conclusions drawn. But experience teaches us the opposite.

In philosophy and in particular in metaphysics, one can often come to know a great deal about an object with distinctness and certainty, and even establish reliable conclusions on that basis prior to having a definition of that object, and even, indeed, when one had no intention of furnishing one. In the case of any particular thing, I can be immediately certain about a number of different predicates, even though I am not acquainted with a sufficiently large number of them to be able to furnish a completely determinate *concept of the thing*, in other words, a definition. Even if I had never defined¹ what an *appetite* was, I should still be able to say with certainty that every appetite presupposed the representation of the object of the appetite; that this representation was an anticipation² of what was to come in the future; that the feeling of pleasure was connected with it; and so forth. Everyone is constantly aware of all this in the immediate consciousness of appetite. One might perhaps eventually be able to arrive at a definition of appetite on the basis of such remarks as these, once they had been compared with each other. But as long as it is possible to establish what one is seeking by inference from a few immediately certain characteristic marks of the thing in question, and to do so without a definition, there is no need to venture on an undertaking which is so precarious.³ In mathematics, as is known, the situation is completely different.

In mathematics, the significance of the signs⁴ employed is certain, for it is not difficult to know what the significance was which one wished to attribute to those signs. In philosophy generally and in metaphysics in particular, words acquire their meaning as a result of linguistic usage,⁵ unless, that is, the meaning has been more precisely determined by means of logical limitation.⁶ But it frequently happens that the same words are employed for concepts which, while very similar, nonetheless conceal within themselves considerable differences. For this reason, whenever such a concept is applied, even though one's terminology may seem to be fully sanctioned by linguistic usage,⁷ one must still pay careful attention to whether it is really the same concept which is connected here with the same sign. We say that a person *distinguishes*⁸ gold from brass if, for example, he recognises⁹ that the density to be found in the one metal is not to be found in the other. We also say that an animal distinguishes¹⁰ one kind of provender from another if it eats the one and leaves the other untouched. Here, the word 'distinguishes' is being used in both cases

¹ *erklärt.* ² *Vorhersehung.* ³ *schlüssig.* ⁴ *die Bedeutung der Zeichen.* ⁵ *Redegebrauch.*

⁶ *durch logische Einschränkung.*

⁷ *wenn gleich die Benennung desselben nach dem Redegebrauch sich genau zu schicken scheint.*

⁸ *unterscheidet.* ⁹ *erkennt* (alt: 'knows' or 'cognises'). ¹⁰ *unterscheidet.*

even though, in the first case, it means 'recognise the difference',⁷ which is something which can never occur without *judging*,⁸ whereas in the second case it merely signifies that *different actions are performed*⁹ when different representations are present, and in this case it is not necessary that a judgement should occur. All that we perceive in the case of the animal is that it is impelled to perform different actions by different sensations; and that is something which is perfectly possible without its in the least needing to make a judgement about similarity¹⁰ or difference.³²

From all this there flow quite naturally the rules which govern the method by which alone the highest possible degree of metaphysical certainty can be attained. These rules are quite different from those which have hitherto been followed. They promise, if they are adopted, to produce a happier outcome than could ever have been expected on a different path. The *first* and the most important *rule* is this: one ought not to start with definitions,³ unless that is, one is merely seeking a nominal definition,^{4,3} such as, for example, the definition: that of which the opposite is impossible is necessary. But even then there are only a few cases where one can confidently establish a distinctly determinate concept right at the very beginning. One ought, rather, to begin by carefully searching out what is immediately certain in one's object, even before one has its definition. Having established what is immediately certain in the object of one's inquiry, one then proceeds to draw conclusions from it. One's chief concern will be to arrive only at judgements about the object which are true and completely certain. And in doing this, one will not make an elaborate parade⁶ of one's hope of arriving at a definition.⁷ Indeed, one will never venture to offer such a definition, until one has to concede the definition, once it has presented itself on the basis of the most certain of judgements.⁸ The *second rule* is this: one ought particularly to distinguish⁹ those judgements which have been immediately made about the object and relate to what one initially encountered in that object with certainty. Having established for certain that none of these judgements is contained in another, these judgements are to be placed at the beginning of one's inquiry, as the foundation of all one's inferences, like the axioms of geometry. It follows from this that, when one is engaged in metaphysical reflection, one ought always particularly to distinguish¹⁰ what is known for certain, even if that knowledge does not amount to a great deal. Nonetheless, one may experiment with cognitions which are not certain¹¹ to see whether they may not

⁷ den Unterschied erkennen. ⁸ oben zu Urtheilen. ⁹ unterschiedlich gehandelt wird.

¹⁰ Überbestimmung. ¹¹ Erklärungen. ¹² Wörterklärung. ¹³ Staat zu machen. ¹⁴ Erklärung.

¹⁵ welche man niemals wagen, sondern dann, wenn sie sich aus den augenscheinlichsten Urtheilen deutlich darbietet, allererst einräumen muss.

¹⁶ besonders auszeichnet. ¹⁷ auszeichne.

¹⁸ obgleich man auch Versuche von ungenügsen Erkenntnissen machen kann.

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put us on the track of certain cognition; but care must be taken to ensure that the two sorts of cognition are not confused. I shall not mention the other rules of procedure which this method has in common with every other rational method. I shall merely proceed to render these rules distinct by means of examples.

The true method of metaphysics is basically the same as that introduced by *Newton* into natural science and which has been of such benefit to it. *Newton's* method maintains that one ought, on the basis of certain experience and, if need be,¹ with the help of geometry, to seek out the rules in accordance with which certain phenomena of nature occur. Even if one does not discover the fundamental principle of these occurrences in the bodies themselves,² it is nonetheless certain that they operate in accordance with this law. Complex natural events are explained once it has been clearly shown how they are governed by these well-established rules.^{3,4} Likewise in metaphysics: by means of certain inner experience, that is to say, by means of an immediate and self-evident inner consciousness,^{5,6} seek out those characteristic marks which are certainly to be found in the concept of any general property.⁷ And even if you are not acquainted with the complete essence of the thing, you can still safely employ those characteristic marks to infer a great deal from them about the thing in question.

EXAMPLE OF THE ONLY CERTAIN⁸ METHOD FOR METAPHYSICS ILLUSTRATED BY REFERENCE TO OUR COGNITION OF THE NATURE OF BODIES

For the sake of brevity, I refer the reader to the proof which is briefly given at the end of Section 2 of the First Reflection.^{9,6} I do so with a view to first establishing here as my foundation the proposition: all bodies must consist of simple substances. Without determining what a body is, I nonetheless know for certain that it consists of parts which would exist even if they were not combined together. And if the concept of a substance is an abstracted⁷ concept, it is without doubt one which has been arrived at by a process of abstraction from the corporeal things which exist in the world. But it is not even necessary to call them substances. It is enough that one can, with the greatest certainty, infer from them that bodies consist of simple parts. The self-evident analysis⁸ of this proposition could easily be offered, but it would be too lengthy to present here.^{9,8} Now, employing infallible proofs of geometry, I can demonstrate that space does not consist of simple parts; the arguments involved are sufficiently well

¹ allenfalls. ² Wenn man gleich den ersten Grund davon in den Körpern nicht einseht.

³ durch sichere innere Erfahrung, d. i. ein unmittelbares augenscheinliches Bewusstsein.

⁴ irgend einer allgemeinen Beschaffenheit. ⁵ sicher (alt: 'sure' or 'certain').

⁶ abstrahirter Begriff. ⁷ die augenscheinliche Zergliederung.

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known.³⁹ It follows that there is a determinate number of parts in each body, and that they are all simple, and that there is an equal number of parts of space occupied by the body,⁴⁰ and they are all compound. It follows from this that each simple part of the body (each element) occupies a space.⁴⁰ Suppose that I now ask: What does 'occupying a space' mean? Without troubling myself about the essence of space, I realise that, if space can be penetrated⁴¹ by anything without there being anything there to offer resistance, then one may, if need be, say that there was something in this space but never that the space was being occupied by it.⁴¹ By this means I cognise that a space is occupied by something if there is something there which offers resistance to a moving body attempting to penetrate that same space. But this resistance is impenetrability.⁴² Accordingly, bodies occupy space by means of impenetrability. But impenetrability is a force, for it expresses a resistance, that is to say, it expresses an action which is opposed to an external force.⁴² And the force which belongs to a body must also belong to the simple parts of which it is constituted. Accordingly, the elements of every body fill their space by means of the force of impenetrability.⁴³ However, I proceed to ask whether the primary elements are not themselves extended since each element in the body fills a space?⁴⁴ At this juncture, I can for once introduce a definition⁴⁴ which is immediately certain. It is the definition, namely, that a thing is *extended* if when it is posited in itself (*absolute*),⁴⁵ it fills a space, just as each individual body, even if I imagine that nothing existed apart from it, would fill a space. However, if I consider an absolutely⁴⁶ simple element, then, if it is posited on its own (with no connection with anything else), it is impossible that there should exist within it a multiplicity of parts existing externally to each other,⁴⁶ and impossible that it should occupy a space *absolute*: it cannot, therefore, be extended. However, the cause of the element occupying a space is the force of impenetrability which it directs against numerous external things. I therefore realise that whereas the multiplicity of its external action flows from that fact, multiplicity in respect of inner parts does not.⁴⁷ Hence, the fact that it occupies a space in the body (*in nexu aliti*)⁴⁵ is not the reason for its being extended.⁴⁶

I shall just add a few words in order to reveal the shallowness⁴⁷ of the

³⁹ den (i.e., Raum) er (i.e., Körper) einnimmt. ⁴⁰ einen Raum einnehmen.

⁴¹ durchdrungen werden.

⁴² es wäre etwas in diesem Raume, niemals aber, dieser Raum werde davon eingenommen.

⁴³ Undurchdringlichkeit. ⁴⁴ eine einer äussern Kraft entgegengesetzte Handlung. ⁴⁵ Erklärung

⁴⁶ ausgedehnt. ⁴⁷ absolute (Kant employs the Latin term *absolute* ['absolutely']).

⁴⁸ schlechterdings. ⁴⁹ dass in ihm vieles sich ausserhalb einander befände. ⁵⁰ absolute.

⁵¹ so sehe ich, dass daraus wohl eine Vielheit in seiner äussern Handlung, aber keine Vielheit in Ansehung innerer Theile.

⁵² mithin es darum nicht ausgedehnt sei, weil es in dem Körper (in nexu cum aliti) einen Raum einnimmt.

⁵³ seicht.

proofs offered by the metaphysicians when, in accordance with their custom, they confidently establish their conclusions on the basis of definitions which have been laid down once and for all as the foundation of their argument. The conclusions instantly collapse if the definitions are defective. It is well-known that most *Newtonians* go further than *Newton* himself and maintain that bodies, even at a distance, attract each other immediately (or, as they put it, through empty space).⁴⁷ I do not propose to challenge the correctness of this proposition, which certainly has much to be said for it. What, however, I do wish to say is that metaphysics has not in the least refuted it. First of all, bodies are *at a distance* from each other⁴⁸ if they are *not touching* each other.⁴⁹ That is the exact meaning of the expression. Now, suppose that I ask what I mean by 'touching'. Without troubling about the definition, I realise that whenever I judge that I am touching a body I do so by reference to the resistance which the impenetrability of that body offers. For I find that this concept originates ultimately from the sense⁵⁰ of touch. The judgement of the eye only produces the surmise that one body will touch another; it is only when one notices the resistance offered by impenetrability that the surmise is converted into certain knowledge. Thus, if I say that one body acts upon another immediately *at a distance*⁵¹ then this means that it acts on it immediately, but not by means of impenetrability. But it is by no means clear here why this should be impossible, unless, that is, someone shows either that impenetrability is the only force possessed by a body, or at least that a body cannot act on any other body immediately, without at the same time doing so by means of impenetrability. But this has never yet been proved, nor does it seem very likely that it ever will be. Accordingly, metaphysics, at least, has no sound reason to object to the idea of immediate attraction at a distance. However, let the arguments of the metaphysicians make their appearance. To start with, there appears the definition: The immediate and reciprocal presence⁵² of two bodies is touch. From this it follows that if two bodies act upon each other immediately, then they are touching each other. Things which are touching each other are not at a distance from each other. Therefore, two bodies never act immediately upon each other at a distance *etc.* The definition is surreptitious.⁵³ Not every immediate presence is a touching, but only the immediate presence which is mediated by impenetrability. The rest is without foundation.⁵⁴

I shall now proceed with my treatise. It is clear from the example I have adduced that both in metaphysics and in other sciences there is a great deal which can be said about an object with certainty, before it has been

⁴⁷ Erklärung (even in the German, the plural would have been grammatically more natural; the sense is in no way affected by this change).

⁴⁸ voneinander entfernt. ⁴⁹ einander nicht berühren. ⁵⁰ Gefühl.

⁵¹ im Körper wirkt in einen entfernten unmittelbar. ⁵² Die unmittelbare gegenseitige Gegenwart.

⁵³ rächtlichen. ⁵⁴ und alles übrige ist in den Wind gebauet.

and yet there are things which can be reliably said of both. What I am chiefly concerned to establish is this: in metaphysics one must proceed analytically throughout, for the business of metaphysics is actually the analysis of confused cognitions.⁹ If this procedure is compared with the procedure which is adopted by philosophers and which is currently in vogue in all schools of philosophy, one will be struck by how mistaken the practice of philosophers is. With them, the most abstracted concepts,¹⁰ at which the understanding naturally arrives last of all, constitute their starting point, and the reason is that the method of the mathematicians, which they wish to imitate throughout, is firmly fixed in their minds. This is why there is a strange¹ difference to be found between metaphysics and all other sciences. In geometry and in the other branches of mathematics, one starts with what is easier and then one slowly advances to the more difficult operations.¹⁰ In metaphysics, one starts with what is the most difficult: one starts with possibility, with existence in general, with necessity and contingency, and so on – all of them concepts which demand great abstraction and close attention. And the reason for this is to be sought chiefly in the fact that the signs for these concepts undergo numerous and imperceptible modifications¹⁰ in use; and the differences between them must not be overlooked. One is told that one ought to proceed synthetically throughout.¹¹ Definitions are thus set up¹² right at the beginning, and conclusions are confidently drawn from them. Those who practise philosophy in this vein congratulate each other for having learnt the secret of thorough thought from the geometers.¹² What they do not notice at all is the fact that geometers acquire their concepts by means of *synthesis*,¹³ whereas philosophers can only acquire their concepts by means of *analysis*¹⁴ – and that completely changes the method of thought.

If philosophers, having entered the natural path of sound reason, first seek out what they know for certain about the abstracted concepts¹⁵ of an object (for example, space or time); and if they refrain from claiming to offer definitions;¹⁶ and if they base their conclusions on these certain *data* alone, making sure that, even though the sign for the concept in question has remained unchanged, the concept itself has not undergone modification whenever its application has changed – if philosophers adopt this approach then, although they may not, perhaps, have quite so many opinions to *hawk* around,¹ the views they do have to offer will be of sound

⁹ ohne ihn erklärt zu haben. ¹⁰ erklärt worden. ¹¹ verpörrne Erkenntnisse aufzulösen.
¹² Die allenabgezogene Begriffe. ¹³ Plan. ¹⁴ sonderbare.
¹⁵ in der Geometrie und andern Erkenntnissen der Grössenlehre. ¹⁶ schwereren Ausübungen.
¹⁷ viele unmerkliche Abartungen. ¹⁸ Es soll durchaus synthetisch verfahren werden.
¹⁹ Man erklärt daher. ²⁰ Meeskünstler. ²¹ durchs Zusammensetzen. ²² durch Auflösen.
²³ abgezogen. ²⁴ Erklärungen. ²⁵ feil zu bieten.

Most philosophers adduce as examples of obscure concepts¹⁵ those which we have in deep sleep. *Obscure* representations are representations of which we are not conscious. Now, some experiences show that we also have representations in deep sleep, and since we are not conscious of them it follows that they were obscure. In the case before us here, the term '*consciousness*' is ambiguous. Either one is not conscious that one has a representation, or one is not conscious that one has had a representation.¹⁶ The former signifies the obscurity¹⁷ of the representation as it occurs in the soul, while the latter signifies nothing more than that one does not remember the representation. Now, all that the example adduced shows is that there can be representations which one does not remember when one is awake; but from this it by no means follows that they may not have been clearly present in consciousness while one was sleeping.¹⁸ A case in point would be the example, adduced by *Sanzaque*,¹⁹ of the person suffering from catalepsy, or the ordinary actions of sleep-walkers. People have a tendency to jump too readily to conclusions, without paying attention to differing cases and investing the relevant concept with a significance appropriate to each respective instance. This may explain why, in the present case, no attention has been paid to what is probably a great mystery of nature: the fact, namely, that it is perhaps during sleep that the soul exercises its greatest faculty in rational thought.²⁰ The only objection which could be raised against this supposition is the fact that we have no recollection of such rational activity when we have woken up; but that proves nothing. Metaphysics has a long way to go yet before it can proceed synthetically. It will only be when analysis has helped us towards concepts which are understood distinctly and in detail²¹ that it will be possible for synthesis to subsume compound cognitions under the simplest cognition,²² as happens in mathematics.

¹ von dem letzteren / B: of the latter mistake / C: di quanto ho detto / Fe & Fi: de la dernière de / at règles / (the reference of this phrase must be to the two procedures he has described; he makes no mention of two mistakes [B] nor of two rules [Fe & Fi]).
² ein Exempel dunkler Begriffe. ³ dass man sie habe, oder, dass man sie gehabt habe.
⁴ Dunkelheit. ⁵ die grösste Fertigkeit der Seele im vernünftigen Denken.
⁶ deutlich und ausführlich.
⁷ wird die Synthesis den einfachsten Erkenntnissen die zusammengesetzte . . . unterordnen können.

concept, then the definition will be wrong and misleading. Numberless examples of such errors could be adduced, and for that very reason I refer only to the above example of touching.⁵⁶ *Secondly*, mathematics, in its inferences and proofs, regards its universal knowledge under signs *in concreto*, whereas philosophy always regards its universal knowledge *in abstracto*, as existing alongside⁵⁷ signs. And this constitutes a substantial difference in the way in which the two inquiries attain to certainty. For since signs in mathematics are sensible means to cognition,⁵⁸ it follows that one can know that no concept has been overlooked, and that each particular comparison has been drawn in accordance with easily observed rules *etc.* And these things can be known with the degree of assurance characteristic of seeing something with one's own eyes. And in this, the attention is considerably facilitated by the fact that it does not have to think things in their universal representation,⁵⁹ it has rather to think the signs as they occur in their particular cognition⁶⁰ which, in this case, is sensible in character. By contrast, the only help which words, construed as the signs of philosophical cognition, afford is that of reminding us of the universal concepts which they signify. It is at all times necessary to be immediately aware of their significance. The pure understanding must be maintained in a state of constant attention,⁶¹ how easy it is for the characteristic mark of an abstracted concept to escape our attention without our noticing, for there is nothing sensible which can reveal to us the fact that the characteristic mark has been overlooked.⁶² And when that happens, different things are taken to be the same things, and the result is error.

What we have established here is this: the grounds for supposing that one could not have erred in a philosophical cognition which was certain can never be as strong as those which present themselves in mathematics. But apart from this, the intuition involved in this cognition⁶³ is, as far as its exactitude⁶⁴ is concerned, greater in mathematics than it is in philosophy. And the reason for this is the fact that, in mathematics, the object is considered under sensible signs *in concreto*,⁶⁵ whereas in philosophy the object is only ever considered in universal abstracted concepts,⁶⁶ and the clarity of the impression made by such abstracted concepts can never be as great as that made by signs which are sensible in character. Furthermore, in geometry the signs are similar to the things signified, so that the certainty of geometry is even greater, though the certainty of algebra⁶⁷ is no less reliable.

⁵⁶ neben. ⁵⁷ sinnliche Erkenntnismittel. ⁵⁸ in ihrer allgemeinen Vorstellung. ⁵⁹ in ihrer einzelnen Erkenntnis. ⁶⁰ Der reine Verstand muss in der Anstrengung erhalten werden. ⁶¹ da nichts Sinnliches uns dessen Verabstümung offenbaren kann. ⁶² die Anschauung dieser Erkenntnis. ⁶³ Richtigkeit. ⁶⁴ in sinnlichen Zeichen in concreto. ⁶⁵ in allgemeinen abgezogenen Begriffen. ⁶⁶ Buchstabenrechnung.

Third reflection: On the nature of metaphysical certainty

§ I. PHILOSOPHICAL CERTAINTY IS ALTOGETHER DIFFERENT IN NATURE FROM MATHEMATICAL CERTAINTY

One is certain if one knows that it is impossible that a cognition should be false.⁶⁸ The degree of this certainty, taken objectively, depends upon the sufficiency in the characteristic marks of the necessity of a truth.⁶⁹ But taken subjectively, the degree of certainty increases with the degree of intuition to be found in the cognition of this necessity.⁷⁰ In both respects,⁷¹ mathematical certainty is of a different kind to philosophical certainty. I shall demonstrate this with the greatest possible clarity.⁷²

The human understanding, like any other force of nature, is governed by certain rules. Mistakes are made, not because the understanding combines concepts without rule,⁷³ but because the characteristic mark which is not perceived in a thing is actually denied of it. One judges that that which one *is not conscious* in a thing *does not exist*. Now, *firstly*, mathematics arrives at its concepts synthetically; it can say with certainty that what it did not intend to represent in the object by means of the definition is not contained in that object. For the concept of what has been defined⁷⁴ only comes into existence by means of the definition;⁷⁵ the concept has no other significance at all apart from that which is given to it by the definition.⁷⁶ Compared with this, philosophy and particularly metaphysics are a great deal more uncertain in their definitions,⁷⁷ should they venture to offer any. For the concept of that which is to be defined⁷⁸ is given. Now, if one should fail to notice some characteristic mark or other, which nonetheless belongs to the adequate distinguishing of the concept in question,⁷⁹ and if one judges that no such characteristic mark belongs to the complete⁸⁰

⁶⁸ das Zureichende in den Merkmalen von der Nothwendigkeit einer Wahrheit.

⁶⁹ so ist er in so fern grösser, als die Erkenntnis dieser Nothwendigkeit mehr Anschauung hat.

⁷⁰ auf das Augenscheinlichste. ⁷¹ regellos. ⁷² der Begriff des Erklärten. ⁷³ Erklärung.

⁷⁴ Erklärungen. ⁷⁵ der Begriff des zu Erklärenden.

⁷⁶ das gleichwohl zu seiner (i.e., der Begriff des zu Erklärenden) hinreichender Unterscheidung gehört. ⁷⁷ ausführlichen.

§ 2. METAPHYSICS IS CAPABLE OF A CERTAINTY WHICH IS SUFFICIENT TO PRODUCE CONVICTION

Certainty in metaphysics is of exactly the same kind as that in any other philosophical cognition, for the latter can only be certain if it is in accordance with the universal principles furnished by the former. We know from experience that, even outside mathematics, there are many cases where, in virtue of rational principles, we can be completely certain, and certain to the degree of conviction. Metaphysics is nothing but philosophy applied to insights of reason which are more general, and it cannot possibly differ from philosophy in this respect.⁴

Errors do not arise simply because we do not know certain things. We make mistakes because we venture to make judgments, even though we do not know everything which is necessary for doing so. A large number of errors, indeed almost all of them, are due to this latter kind of over-hastiness.⁵ You have certain knowledge of some of the predicates of a thing. Very well! Base your conclusions on this certain knowledge and you will not go wrong. But you insist on having a definition at all costs. And yet you are not sure that you know everything which is necessary to drawing up such a definition; nonetheless, you venture on such an undertaking and thus you seek out cognitions which are certain and distinct, and provided that one does not so lightly lay claim to be able to furnish definitions. Furthermore, you could also establish a substantial part of an indubitable conclusion,⁶ and do so with certainty; but do not, on any account, permit yourself to draw the whole conclusion,⁷ no matter how slight the difference may appear to be. I admit that the proof we have in our possession for establishing that the soul is not matter⁸ is a good one.⁹ But take care that you do not infer from this that the soul is not of a material nature.¹⁰ For this latter claim is universally taken to mean not merely that the soul is not matter, but also that it is not a simple substance of the kind which could be an element of matter.¹¹ But this

⁴ Die Metaphysik ist nur eine auf allgemeinere Vernunftgrundsätze angewandte Philosophie, und sie kann mit ihr unmöglich anders bewandt sein.

⁵ Vorwitz. ⁶ auf einen beträchtlichen Theil einer gewissen Folge schliessen.

⁷ Erhalten auch ja nicht, den Schluss auf die ganze Folge zu ziehen.

⁸ dass die Seele nicht Materie sei. ⁹ dass die Seele nicht von materieller Natur sei.

¹⁰ Denn hierunter versteht jedermann nicht allein, dass die Seele keine Materie sei, sondern auch nicht eine solche einfache Substanz, die ein Element der Materie sein könnte. / (The final clause is ambiguous, for it is grammatically unclear whether die is subject or predicate. B assumes the latter: that it is not a simple substance such as an element of matter could be.³ C adopts the former: *taie poter essere un elemento di materia*;³ so do Fe & Fi: *quæzile n'est pas un substance simple qui puisse être un élément de la matiere*.) Since Kant's concern here is not whether the soul is a simple substance but whether the soul is material, the reading of C, Fe, and Fi seems the more likely.)

requires a separate proof – the proof, namely, that this thinking being does not exist in space in the way in which a corporeal element exists in space, that is to say, in virtue of impenetrability; it also requires proof that this thinking being could not, when combined with other thinking beings, constitute something extended, a conglomerate.¹² But no proof has actually been given yet of these things. Such a proof, were it to be discovered, would indicate the incomprehensibility of the way in which a spirit is present in space.¹³

§ 3. THE CERTAINTY OF THE FIRST FUNDAMENTAL TRUTHS OF METAPHYSICS IS NOT OF A KIND DIFFERENT FROM THAT OF ANY OTHER RATIONAL COGNITION, APART FROM MATHEMATICS

The philosophy of *Crisius** has recently claimed to give metaphysical cognition quite a different form.¹⁴ It has done so by refusing to concede to the law of contradiction the pre-eminent right to be regarded as the supreme and universal principle of all cognition. *Crisius* introduced a large number of other principles which were immediately certain and indemonstrable, and he maintained that the correctness of these principles could be established by appeal to the nature of our understanding, employing the rule that what I cannot think as other than true is true. Such principles include: what I cannot think as existing has never existed; all things must be somewhere and somewhere, *etc.*¹⁵ I shall briefly indicate the true character of the first fundamental truths of metaphysics: at the same time, I shall offer a brief account of the true content of *Crisius*'s method, which is not as different from that of the philosophy contained in this treatise as may, perhaps, be thought. On this basis, it will also be possible to establish in general the degree of possible certainty to which metaphysics can aspire.

All true propositions must be either affirmative or negative. The *form* of every *affirmation* consists in something being represented as a characteristic mark of a thing, that is to say, as identical with the characteristic mark of another in any essential respect.

* I have deemed it necessary here to mention the method of this new philosophy. It quickly became so famous and it has been so widely admitted to have been instrumental in clarifying many of the things we know that it would have been a major omission not to have mentioned it in a work which is concerned with metaphysics in general. What I am touching upon here is merely the method which is peculiar to it; for the differences which exist between particular individual propositions is not of itself sufficient to distinguish one philosophical system from another in any essential respect.

¹² Klumpfen. ¹³ vernünftigen Erkenntnis.

¹⁴ was ich nicht existirend denken kann, das ist einmal nicht gewesen; ein jedes Ding muss irgendwo und irgendwem sein u.d.g.

of a thing. Thus, every affirmative judgement is true if the predicate is identical with the subject. And since the *form* of every *negation* consists in something being represented as in conflict with a thing, it follows that a negative judgement is true if the predicate *contradicts* the subject. The proposition, therefore, which expresses the essence of every affirmation and which accordingly contains the supreme formula of all affirmative judgements, runs as follows: to every subject there belongs a predicate which is identical with it. This is the *law of identity*. The proposition which expresses the essence of all negation is this: to no subject does there belong a predicate which contradicts it. This proposition is the *law of contradiction*, which is thus the fundamental formula of all negative judgements. These two principles together constitute the supreme universal principles, in the formal sense of the term, of human reason in its entirety.⁶¹ Most people have made the mistake of supposing that the law of contradiction is the principle of all truths whatever, whereas in fact it is only the principle of negative truths. Any proposition, however, is indemonstrable if it is immediately thought under one of these two supreme principles and if it cannot be thought in any other way. In other words, any proposition is indemonstrable if either the identity or the contradiction is to be found immediately in the concepts, and if the identity and the contradiction cannot or may not be understood through analysis by means of intermediate characteristic marks.⁶² All other propositions are capable of proof. The proposition, a body is divisible, is demonstrable, for the identity of the predicate and the subject can be shown by analysis and therefore indirectly: a body is *compound*, but what is compound is *divisible*, so a body is divisible. The intermediate characteristic mark here is *being compound*. Now, in philosophy there are, as we have said above, many indemonstrable propositions. All these indemonstrable propositions are subsumed under the formal first principles, albeit immediately. However, insofar as they also contain the grounds of other cognitions, they are also the first material principles of human reason. For example: *a body is compound* is an indemonstrable proposition, for the predicate can only be thought as an immediate and primary characteristic mark in the concept of a body.⁶³ Such material principles constitute, as Crusius rightly says, the foundation of human reason and the guarantor of its stability.⁶⁴ For, as we have mentioned above, they provide the stuff of definitions⁶⁵ and, even when one is not in possession of a definition,⁶⁶ the *data* from which conclusions can be reliably drawn.

And Crusius is also right to criticise other schools of philosophy for ignoring these material principles and adhering merely to formal principles. For on their basis alone it really is not possible to prove anything at

⁶¹ *widerstreitend.*

⁶² *die Grundlage und Festigkeit der menschlichen Vernunft.*

⁶³ *Erklärungen.*

⁶⁴ *Erklärung.*

all. Propositions are needed which contain the intermediate concept by means of which the logical relation of the other concepts to each other can be known in a syllogism. And among these propositions there must be some which are the first. But it is not possible to invest some propositions with the status⁶⁷ of supreme material principles unless they are obvious⁶⁸ to every human understanding. It is my conviction, however, that a number of the principles adduced by Crusius are open to doubt, and, indeed, to serious doubt.

This celebrated man proposes setting up a supreme rule to govern all cognition and therefore metaphysical cognition as well. The supreme rule is this: *what cannot be thought as other than true is true, etc.* However, it can easily be seen that this proposition can never be a ground of the truth of any cognition. For, if one concedes that there is no other ground of truth which can be given, apart from the impossibility of thinking it other than true, then one is in effect saying that it is impossible to give any further ground of truth, and that this cognition is indemonstrable. Now, of course, there are many indemonstrable cognitions. But the feeling of conviction which we have with respect to these cognitions is merely an *inward*,⁶⁹ not an argument establishing⁷⁰ that they are true.⁶³

Accordingly, metaphysics has no formal or material grounds of certainty which are different in kind from those of geometry.⁶⁴ In both metaphysics and geometry, the formal element of the judgements exists in virtue of the laws of agreement and contradiction.⁶⁵ In both sciences, indemonstrable propositions constitute the foundation on the basis of which conclusions are drawn. But whereas in mathematics the definitions are the first indemonstrable concepts of the things defined,⁶⁶ in metaphysics, the place of these definitions is taken by a number of indemonstrable propositions which provide the primary data. Their certainty may be just as great as that of the definitions of geometry. They are responsible for furnishing either the stuff, from which the definitions⁶⁷ are formed, or the foundation, on the basis of which reliable conclusions are drawn. Metaphysics is as much capable of the certainty which is necessary to produce conviction⁶⁸ as mathematics. The only difference is that mathematics is easier and more intuitive in character.⁶⁹

⁶⁷ *den Werth.* ⁶⁸ *augenscheinlich.* ⁶⁹ *Gesichtsgrund.* ⁷⁰ *Beweisgrund.*

⁶¹ *In beiden geschieht das Formale der Urtheile nach den Sätzen der Einstimmung und des Widerspruches.*

⁶² *der erklärten Sachen.* ⁶³ *Erklärungen.* ⁶⁴ *eine zur Überzeugung nöthige Gewissheit.*

⁶⁵ *einer grössern Anschauung theilhaftig.*

⁶⁶ *den Dingen.*

⁶⁷ *den Dingen.*

⁶⁸ *den Dingen.*

⁶⁹ *den Dingen.*

*Fourth reflection: Concerning the distinctness
and certainty of which the fundamental
principles of natural theology and morality
are capable*

§1. THE FUNDAMENTAL PRINCIPLES OF
NATURAL THEOLOGY ARE CAPABLE OF THE
GREATEST PHILOSOPHICAL CERTAINTY⁶⁴

Firstly, distinguishing one thing from another is easiest and most distinct if the thing in question is the only possible thing of its kind. The object of natural religion is the unique first cause; its determinations are such that they cannot easily be confused with those of other things. But the greatest conviction is possible when it is absolutely necessary that these and no other predicates belong to a thing. For in the case of contingent determinations it is generally difficult to discover the variable conditions of its predicates. Hence, the absolutely necessary being is an object such that, as soon as one is on the right track of its concept, it seems to promise even more certainty than most other philosophical cognition. In this part of my undertaking, all that I can do is consider the possible philosophical cognition of God in general; for if we were to examine the philosophical theories relating to this object which are actually current, we should be taken too far afield. The chief concept which here offers itself to the metaphysician is that of the absolutely necessary existence of a being.⁶⁵ In order to arrive at this concept, the metaphysician could first of all ask the question: *is it possible that absolutely nothing at all should exist?* Now, if he realises that, were absolutely nothing at all to exist, then no *existence* would be given and there would be *nothing to think* and there would be no *possibility*⁶⁶ — once that is realised, all that needs to be investigated is the concept of the existence of that which must constitute the ground of all possibility. He will develop this idea and establish the determinate concept of the absolutely necessary being.⁶⁵ I do not wish to become involved in a detailed investigation of this

most perfect and necessary Being is established, then the concepts of that Being's other determinations will be established with much greater precision, for these determinations will always be the greatest and most perfect of their kind; they will also be established with much greater certainty, for the only determinations which will be admitted will be those which are necessary.⁶⁶ Suppose, for example, that I am to determine the concept of the divine *omnipotence*. I have no difficulty in recognising the following fact. The being, upon which everything else depends — for it is itself independent — determines through its presence the *place*⁶⁷ of everything else in the world; it does not, however, determine *for itself* a place among those things, for if it did it would belong to the world as well. Therefore, strictly speaking, God does not exist in any *place*,⁶⁷ although He is present to all things in all the *places in which things exist*.^{66, 67} Likewise, I realise that, whereas the things in the world which follow upon one another are in His power, nonetheless He does not in virtue of that fact determine for Himself a moment of time in this series; as a consequence, nothing is past or future in relation to God. If, therefore, I say that God foresees the future, this does not mean that God sees that which *relative to Him is future*. It rather means that God sees that which, relative to certain things in the world, is future, that is to say, that which follows upon a state of those certain things in the world. From this it can be seen that cognitions of the future, the past and the present are not, relative to the action of the divine understanding, different from each other.⁶⁸ God rather cognises them all as actual things in the universe. This foreknowledge⁶⁸ can be imagined much more determinately and with much greater distinctness in God than in a thing which belongs to the totality of the world.

Metaphysical cognition of God is thus capable of a high degree of certainty in all those areas where no analogon⁶⁹ of contingency is to be encountered. But when it comes to forming a judgement about His free actions, about providence,⁶⁹ or about the way in which He exercises justice and goodness, there can only be, in this science, an approximation to certainty, or a certainty which is moral. For there is still a great deal of 'obscurity' surrounding the concepts which we have of these determinations, even when they occur in ourselves.

⁶⁴ diesen Plan. ⁶⁵ einigen. ⁶⁶ den Ort. ⁶⁷ an keinem Ort.

⁶⁸ aber er ist allen Dingen gegenwärtig in allen Orten wo die Dinge sind. ⁶⁹ verschindeln.

⁶⁵ dieses Vorherschen. ⁶⁶ Analogon. ⁶⁷ Vorsehung. ⁶⁸ noch viel Unentwickeltes.

⁶⁵ die schlechterdings nothwendige Existenz eines Wesens.

⁶⁶ dass alsdann gar kein Dasein gegeben ist, auch nichts zu denken, und keine Möglichkeit stann find.

§ 2. THE FUNDAMENTAL PRINCIPLES OF
MORALITY IN THEIR PRESENT STATE ARE NOT
CAPABLE OF ALL THE CERTAINTY NECESSARY
TO PRODUCE CONVICTION

In order to make this claim clear I shall merely show how little even the fundamental concept of *obligation*¹ is yet known, and how far practical philosophy must still be from furnishing the distinctness and the certainty of the fundamental concepts and the fundamental principles which are necessary for certainty in these matters. The formula by means of which every obligation is expressed is this: one *ought* to do this or that and abstain from doing the other. Now, every *ought* expresses a necessity of the action and is capable of two meanings. To be specific: either I ought to do something (as a *means*) if I want something else (as an *end*),² or I *ought immediately* to do something else (as an *end*) and make it actual. The former may be called the necessity of the means (*necessitas problematica*),³ and the latter the necessity of the ends (*necessitas legalis*).⁴ The first kind of necessity does not indicate any obligation at all. It merely specifies a prescription as the solution to the problem concerning the means I must employ if I am to attain a certain end.⁵ If one person tells another what actions he must perform or what actions he must abstain from performing if he wishes to advance his happiness, he might perhaps be able, I suppose, to subsume all the teachings of morality⁶ under his prescription. They are not, however, obligations any longer except in the sense, say, in which it would be my obligation to draw two intersecting arcs if I wanted to bisect a straight line into two equal parts. In other words, they would not be obligations at all; they would simply be recommendations to adopt a suitable procedure,⁷ if one wished to attain a given end.⁸ Now since no other necessity attaches to the employment of means than that which belongs to the end, all the actions which are prescribed by morality under the condition of certain ends are contingent. They cannot be called obligations as long as they are not subordinated to an end which is necessary in itself. Take the following examples: I ought to advance the total greatest perfection⁹ or: I ought to act in accordance with the will of God. To whichever of these two principles the whole practical philosophy¹⁰ is to be subordinated, the principle chosen must, if it is to be a rule and ground of obligation,¹¹ command the action as being immediately necessary and not conditional upon some end. And here we find that such an immediate

¹ nach ihrer gegenwärtigen Beschaffenheit. ² Verbindlichkeit. ³ Zweck.

⁴ sondern nur die Vorschrift als die Auflösung in einem Problem, welche Mittel diejenige sind, deren ich mich bedienen müsse, wie ich einen gewissen Zweck erreichen will.

⁵ Lehren der Moral. ⁶ Anweisungen eines geschickten Verhaltens.

⁷ ich soll. . . die gesamte grösste Vollkommenheit befördern. ⁸ die ganze praktische Weltweisheit.

⁹ eine Regel und Grund der Verbindlichkeit.

supreme rule of all obligation must be absolutely indemonstrable. For it is impossible, by contemplating a thing or a concept of any kind whatever, to recognise⁵ or infer what one ought to do, if that which is presupposed is not an end, and if the action is a means. But this cannot be the case; if it were, our principle would not be a formula of obligation; it would be a formula of problematic skill.⁴

Having convinced myself after long reflection on this matter, I can now briefly show the following. The rule: perform the most perfect action in your power, is the first *formal ground* of all obligation to act.⁶ Likewise, the proposition: abstain from doing that which will hinder the realisation of the greatest possible perfection, is the first *formal ground* of the duty to *abstain from acting*.⁷ And just as, in the absence of any material first principles, nothing flowed from the first formal principles of our judgements of the truth, so here no specifically determinate obligation⁸ flows from these two rules of the good, unless they are combined with indemonstrable material principles of practical cognition.

It is only recently, namely, that people have come to realise that the faculty of representing the *true is cognition*,⁹ while the faculty of experiencing the *good is feeling*,¹ and that the two faculties are, on no account, to be confused with each other. Now, just as there are unanalysable concepts of the true, that is to say, unanalysable concepts of that which is encountered in the objects of cognition, regarded in itself,² so too there is an unanalysable feeling of the good³ (which is never encountered in a thing absolutely but only relatively to a being endowed with sensibility).⁴ One of the tasks of the understanding is to analyse and render distinct the compound and confused concept of the good by showing how it arises from simpler feelings of the good. But if the good is simple,⁵ then the judgement: 'This is good', will be completely indemonstrable.⁶ This judgement will be an immediate effect of the consciousness of the feeling of pleasure combined with the representation of the object.⁷ And since there are quite certainly many simple feelings of the good to be found in us, it follows that there are many such unanalysable representations. Accordingly, if an action is

¹ erkennen. ² Dieses aber muss es nicht sein. ³ problematischen Geschicklichkeit.

⁴ Verbindlichkeit zu Handeln. ⁵ Pflicht zu Unterlassen.

⁶ keine besonders bestimmte Verbindlichkeit. ⁷ die Erkenntniss. ⁸ das Gefühl.

⁹ d. i. desjenigen, was in den Gegenständen der Erkenntniss, für sich betrachtet angetroffen wird.

¹⁰ ein unauflösliches Gefühl des Guten. ¹¹ ein empfindendes Wesen.

¹² Allein ist dieses einmal einfach / (The translators are in disagreement about the reference of the *dieses*: because it is newer it cannot be *Empfindungen* [the view of B & Fe] nor *Begriff* [the view of F]. There are only two possibilities: *das Gefühl des Guten* [which is too far back] and *das Gute* [at the end of the preceding clause], which is the view of C and the present translator.)

¹³ völlig unerweislich.

¹⁴ eine unmittelbare Wirkung von dem Bewusstsein des Gefühls der Lust mit der Vorstellung des Gegenstandes.

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immediately represented as good, and if it does not contain concealed within itself a certain other good, which could be discovered by analysis and on account of which it is called perfect, then the necessity of this action is an indemonstrable material principle of obligation. Take for example the principle: love him who loves you. This is a practical principle which is, it is true, subsumed, albeit immediately, under the supreme formal and affirmative rule of obligation. For since it cannot be further shown by analysis why a special perfection is to be found in mutual love,⁷ it follows that this rule has not been proved practically. In other words, the rule has not been proved by tracing it back to the necessity of another perfect action. It is rather subsumed immediately under the universal rule of good actions. It is perhaps possible that the example I have adduced does not present the matter with sufficient distinctness and persuasiveness.⁸ However, the limits of a treatise such as the present one — limits which, perhaps, I have already overstepped — do not permit me the completeness I would wish. An immediate ugliness⁹ is to be found in the action, which conflicts with the will of Him, from Whom all goodness comes and to Whom we owe our existence. This ugliness is clearly apparent,¹⁰ provided¹¹ that we do not straightaway focus our attention on the disadvantages, which may, as consequences, accompany such behaviour. Hence, the proposition: do what is in accordance with the will of God, is a material principle of morality. Nonetheless, it is formally though immediately subsumed under the supreme universal formula, of which mention has already been made. In both practical and in theoretical philosophy one must avoid lightly taking for indemonstrable that which in fact is capable of proof. Notwithstanding, those principles, which as postulates contain the foundations of all the other practical principles, are indispensable. *Hutcheson*¹² and others have, under the name of moral feeling,¹³ provided us with a starting point from which to develop some excellent observations.¹⁴ It is clear from what has been said that, although it must be possible to attain the highest degree of philosophical certainty in the fundamental principles of morality, nonetheless the ultimate fundamental concepts of obligation need first of all to be determined more reliably.¹⁵ And in this respect, practical philosophy is even more defective than speculative philosophy, for it has yet to be determined whether it is merely the faculty of

cognition,¹⁶ or whether it is feeling (the first inner ground of the faculty of desire)¹⁷ which decides its first principles.

Postscript

Such are the thoughts I surrender to the judgement of the Royal Academy of Sciences. I venture to hope that the reasons presented here will be of some value in clarifying the subject, which was what was requested. In what concerns the care, precision and elegance¹⁸ of the execution: I have preferred to leave something to be desired in that respect, rather than to allow such matters to prevent my presenting this inquiry for examination at the proper time, particularly since this defect is one which could easily be remedied should my inquiry meet with a favourable reception.¹⁹

⁷ Erkenntnisvernögen. ⁸ Begleitungsvermögen. ⁹ Sorgfalt, Abgemessenheit und Zierlichkeit.

¹⁰ auf den Fall der günstigen Aufnahme.

¹¹ Gegenliebe. ¹² nicht deutlich und überzeugend genug. ¹³ eine unmitttelbare Hässlichkeit.

¹⁴ klar.
¹⁵ wenn gleich / B: even if / C: anche quando / Fe: même si / Fi: quovunque / (the words *wenn gleich* cannot have their usual adversative force without committing Kant to a view which is the very opposite of the position he is maintaining: Kant's point is that if we do look at the disadvantages which arise from the action, the intrinsic and immediate ugliness of the action will be obscured and not apparent at all).

¹⁶ das moralischen Gefühl. ¹⁷ einen Anfang zu schönen Bemerkungen geliefert.
¹⁸ sicherer bestimmt.