KANT'S CONCEPTION OF GOD

KANT'S CONCEPTION OF GOD

A CRITICAL EXPOSITION OF ITS METAPHYSICAL DEVELOPMENT TOGETHER WITH A TRANSLATION OF THE

NOVA DILUCIDATIO

BY

F. E. England, M.A., Ph.D.

WITH A FOREWORD BY

Professor G. Dawes Hicks

Es ist durchaus nöthig, dass man sich vom Dasein Gottes überzeuge; es ist aber nicht eben so nöthig, dass man es demonstrire.

KANT

LONDON

GEORGE ALLEN & UNWIN LTD

FIRST PUBLISHED IN 1929

rights reserved

PRINTED IN GREAT BRITAIN BY
UNWIN BROTHERS LTD., WOKING

PREFATORY NOTE

THIS essay is an attempt to follow critically the development of Kant's metaphysical thought with special reference to the concept of God, a concept which furnishes a sort of vantage-ground from which to estimate the significance of the changes in Kant's philosophical outlook, while itself remaining throughout substantially the same in content. I shall try to show that in his recoil from the speculative metaphysics of the Wolffian school Kant continued to conceive of the universe, after the manner of Leibniz,[1] as consisting of substances whose reciprocal *commercium* was made possible through their common origin as essences in the being of God. After tracing briefly the gradual emergence of those considerations which ultimately led to the critical position, I shall try to show that by viewing epistemology as a species of logic Kant was led to a confused exposition of the critical doctrine of judgment, and in particular of the function of the categories. Thereupon I shall endeavour to make clear that from the critical premises rightly construed, the subjectivism characteristic of one trend of Kant's thought does not follow, and that what has been called his phenomenalism must be seriously qualified. The categories will not, that is to say, evince themselves as constitutive of objects, but as principles of interpretation, and the critical theory of knowledge will not render metaphysics impossible (Kant himself declared[2] that the transcendental philosophy had for its object the founding of metaphysics), but prepare the ground for a new metaphysics.

Turning to the concept of God in the critical period, I shall seek to justify the position that Kant's artificial "deduction" of the Ideal of pure reason and his general

[1] Kant was influenced but little by Spinoza's philosophy. See *Was heisst sich im Denken orientiren?* and cp. *Kantstudien*, Bd. V, S. 291.

[2] *Fortschritte der Metaphysik*, Hart., VIII. 533. Cp. *Logik*, Ber. IX. 32.

formulation of the problem of the unconditioned are really of minor importance, but that there is implied in the critical doctrine as a whole the conception of a necessary ground of the world of experience, that the idea of the unconditioned is logically prior to and involved in the notion of the conditioned. Further, I shall contend that the purposiveness which admittedly is displayed in the organic realm is unintelligible unless the mechanism of nature be grounded in a supreme intelligence, and that finally the facts of the moral life, and in particular that of moral obligation, presuppose a moral order, and this in turn presupposes a supreme moral Personality as its ground.

In conclusion, I shall venture to argue that the Ideas of reason, in so far as they are valid, are not properly described as heuristic fictions, as Kant was prone to describe them, but are at their own level involved in the progressive systematisation of experience. Ideas and categories are alike metaphysically knowable, and the supreme test of their validity is their indispensability. The Idea of the unconditioned is shown by Kant to be indispensably involved in experience, and it was, I shall urge, largely because Kant's judgment was influenced by a lingering adherence to the formalism of Wolff's logical school and to the crude psychology of his day that his transcendentalism was not extended over the entire field of experience, and the Idea of the unconditioned was not accepted as a valid metaphysical principle.

In an appendix I subjoin a translation of the *Nova Dilucidatio*, the only important Latin metaphysical work of Kant's not hitherto translated into English, and one which is of great interest and importance in the history of the development of Kant's metaphysics.

Reference has been made throughout to Kant's *Gesammelte Schriften*, published by the *Königlich Preussischen Akademie der Wissenschaften*, Berlin, 1910 ff, which I denote by the abbreviation *Ber*. In the case of the *Critique of Pure Reason*,

however, I have followed the usual method of denoting the first edition as A and the second as B, giving the original paging of those editions. Where reference is made to a work not yet included in the Berlin Edition, I have quoted Hartenstein's edition of the *Werke*. Among other important works referred to are Kant's loose notes (*Lose Blätter*, 1891 ff.), edited by Reicke, and published in the *Altpreussische Monatsschrift*, Bd. xix–xxi, also various jottings edited by Benno Erdmann in two volumes under the title *Reflexionen* (1884).

F. E. ENGLAND

CONTENTS

PAGE

PREFATORY NOTE 7

FOREWORD BY PROFESSOR G. DAWES HICKS 13

A. THE PRE-CRITICAL METAPHYSICS AND ITS LOGICAL FOUNDATIONS

CHAPTER

I. THE PROBLEM AS KANT ENCOUNTERED IT 21

II. THE PRE-CRITICAL CONCEPTION OF GOD 42

III. FROM RATIONALISM TO CRITICISM 63

B. THE TRANSCENDENTAL LOGIC AND ITS METAPHYSICAL IMPLICATIONS

IV. THE CRITICAL DOCTRINE OF JUDGMENT 83

V. THE FUNDAMENTAL CONDITIONS OF KNOWLEDGE 92

VI. THE IDEAL OF PURE REASON 113

C. THE CONTENT AND VALIDITY OF THE IDEA OF GOD

VII. THE CONTINGENCY OF THE PHENOMENAL WORLD 129

VIII. THE PURPOSIVENESS DISPLAYED IN NATURE 143

IX. THE FACTS OF THE MORAL LIFE 169

X. THE IDEA OF GOD AS ULTIMATE GROUND 185

APPENDIX. TRANSLATION OF THE "NOVA DILUCIDATIO" 211

INDEX 255

FOREWORD

It is the wish of the author that I should contribute a short introduction to his book, but it is really in need of none. During many years Dr. England has been assiduously devoting himself to a minute study of the writings of Kant and of the huge literature that has gathered round them; and this volume contains the firstfruits of his labour, to be succeeded, I trust, by other fruits in the coming time. For the critical philosophy, notwithstanding its manifold difficulties and inconsistencies, is still a living system of thought, and likely long to remain so. It formed the foundation of all the speculative efforts of the nineteenth century—not, indeed, in the sense that it superseded the systems, either empirical or rational, which preceded it, but in the sense that it so took up into itself what was of importance in those systems as to give a new form to philosophical questions. And I believe that, for a successful handling of the epistemological and metaphysical problems of the present day, a thorough grasp of the method pursued and the lines of reflexion followed by the critical philosophy is an essential preliminary.

In the following pages there has been selected for treatment the metaphysical problem, which was undoubtedly for Kant fundamental, and to which he was constantly recurring throughout the various stages of his intellectual development. Dr. England has, I think, been well advised in beginning with the earlier treatises, and in then tracing the way in which the critical standpoint was gradually reached. So far as the problem he is specially handling is concerned, the *Nova Dilucidatio*, the first of Kant's metaphysical treatises, is certainly of peculiar significance; and the translation here made of it ought to prove of considerable service to the student. In it Kant is to be found, not, it is true, actually breaking away from, but already convinced of certain crucial difficulties in, the Leibnizian doctrine as it had been

propounded by Wolff. He seems never to have been satisfied with the Wolffian identification of the highest principles of truth, and that of sufficient reason. From the first, he appears to have been convinced that logical ground and real ground are *toto genere* distinct, although at this period he could scarcely have been acquainted with the familiar contrast in Hume's *Inquiry* of relations of ideas with those of matters of fact. Here, too, he is to be found, though still more decisively in the *Beweisgrund* of eight years later, insisting on the doctrine which became so prominent in his later critique of speculative theology that existence is no part of the content of any conception—no characteristic which may be extracted from it and used as its predicate. Dr. England has described Kant's "voyage of discovery" from the pre-Critical to the Critical standpoint. The story is full of interest, and cannot fail to be suggestive to those who are now pursuing the path of philosophical reflexion.

On the whole, I am largely in accord with the criticism which Dr. England brings to bear on the developed Kantian position. I agree that what was no doubt a cardinal tenet of the Critical theory—namely, that it is the peculiar function of thought to be productive of those components of a known object which constitute it, apart from its special sensuous clothing an object at all—cannot be sustained; and that, therefore, the antithesis which Kant regarded as fundamental between category and Idea calls to be rejected. Difference enough there assuredly may be, but it will be a kind of difference that will come to light in the attempt to determine the part played by each in the development of our knowledge of the objective world, and not a difference between that which enters into the very structure of an object and that which indicates only a point of view from which the object in question may be contemplated. The difference, that is to say, will not be a difference between constitutive and regulative principles. The Post-Kantian thinkers broke down the antithesis by attempting to show that the latter

principles were no less constitutive than the former. But whoever has come to the conclusion that the function of thought is not of the nature which Kant took it to be will be constrained rather to look upon the so-called constitutive principles as being in truth regulative—in other words, as ways in which a thinking mind interprets the general features of the world of experience. And then the so-called "Ideas" may be regarded as representing a further phase of such reflective thought.

One of the grounds that led Kant to institute the antithesis just referred to is perhaps worth pointing out. The "Ideas" were, for him, ideas of the Unconditioned. And when he sought to determine the way in which the Unconditioned is represented by us, he was compelled to specify certain positive characteristics. The Unconditioned he delineated as the complete, that the knowledge of which would satisfy the effort of thought or the understanding which is embodied in the process of unifying. Completeness would mean perfect unity of experience. But the unification which the understanding carries out on and in the matter of experience never can be complete. Why not? I conceive it to be doubtful whether Kant ever definitely put to himself this question, but there can be little hesitation about the answer. The impossibility is due, I take it, to the character of the formal element in intuition, space, and time. Sometimes, it is true, Kant inclines to connect the impossibility with the given character of the material of intuition, inexhaustibility being then equivalent to contingency. Yet, in the long run, the burden of explanation was made to rest on the unique character of space and time, in consequence of which the understanding had to be conceived as in its own nature carrying out an endless task.

Nevertheless, although it was, in Kant's view, confusion of thought that induces us to imagine some *object* beyond the range of experience which would constitute the completed totality required, he never regarded the demand for totality

as a mere will of the wisp, enticing the understanding into aimless wanderings. On the contrary, he conceived that the demand had a real source and an important function. Its source was the general character which the understanding possessed of unifying, of systematically connecting; its function was to determine us to seek in the concrete field of experience for as close a correspondence as is possible to the formal unity involved in the procedure of the understanding. There *is* unity in experience, but it is unity of form merely; and the one precept of reason is to seek for a concrete systematic whole as adequate as possible to this formal unity.

Kant's point of view in this respect is, I think, significantly brought out in the concluding sections of the first *Critique*. I regard the criticism of the speculative proofs for the existence of God as both valuable so far as it goes and harmless in respect to any interest one may feel in the issue which they raise. It was certainly worth while to emphasise in the strongest manner that, however we may have to determine the nature of the supreme Being, that nature can in no way be legitimately represented after the fashion in which we are wont to represent an *object* of experience. Indeed, it was perhaps desirable to enforce the consideration that with finite notions and finite categories it must be impossible to determine the mode of existence of the Being that we are compelled by reason to contemplate as infinite. At the same time, I conceive that what Kant laid down leaves a larger field open than probably he was himself aware of. For the problem which finds its solution ordinarily through the notion of God is a real problem, a problem put by reason itself, and in respect to which, therefore, we may feel sure that a solution sufficient in itself is to be had. Kant was strenuous in insisting that while the field of the understanding may bring before us problems really insoluble, the field of reason, which has not its problems thrust upon it from without, must contain within itself the means of

solving these problems. The "Ideas" of reason must, he held, have a significance, and a significance which will conform to the ultimate demand for unity which lies at the root of all the special problems that reason puts to itself.

If, then, the speculative determinations advanced in regard to the notion of God have to be rejected, in what form is the unity demanded by reason for the whole field of experience to be found? What reason demands is that experience should exhibit itself to the apprehending subject as in all its empirical details so arranged in systematic order as to constitute unified knowledge. And it is particularly noteworthy that in the notion which Kant brings to the front at the conclusion of his treatment of speculative theology, and which in the third *Critique* he works out in more detail—the notion of adaptation or end—there is reference to a much more concrete determination of the nature of the unity involved in experience than would appear at first sight permissible along the lines of his teaching. For this notion of the whole of experience as being adapted to human reason, and of reason being, therefore, able to discover in the realm of particular facts verification of a universal principle which is not determinative in respect to those particular facts nor a necessary constituent in our knowledge of them, turns out to be no other than the assumption that the complex of empirical fact has been brought about by intelligence. The more concrete expression of the idea of the intelligibility of nature, of end or adaptation in nature, is, according to Kant, the idea of an intuitive Understanding that synthetically produces the particulars in and through the representation of the whole, in and through the representation of general laws.

It is true that in Kant's view this ultimate form of the teleological principle can, so far as the sphere of knowledge is concerned, be regarded as having no more than subjective validity as a principle of reflective judgment. In the sphere of knowledge it can never be possible to regard any one

object as itself constituting an absolute end. Here the notion of purpose must be restricted to the thought of the general adaptation of nature as a whole to the faculty of reason. But, he contends, in the sphere of practice, we are furnished with a conception of which there is no counterpart in the sphere of theoretical knowledge; in the sphere of practice, a final end is presented. Man, not as a natural product, but as a moral being, as the bearer of the moral law, *is* a final end—a final end, not merely in respect to nature, but in respect to the whole world of intelligible reality. The realisation of the highest good *is* a final end. Not only so. Although knowledge and practice lie in one sense apart from one another, yet we must assume a certain conformity between these two spheres. We must conceive that the whole structure of things is of such a nature as to provide the means through which realisation of this final end is possible. Consequently, we are constrained to think of the whole system of existent fact as being adapted to the final end of the practical reason. An ethical teleology is thus the ultimate form which Kant's metaphysical reflexions assume: "The world must be represented as having originated from an idea, if it is to harmonise with that use of reason without which we should hold ourselves unworthy of reason, the moral use, which rests entirely on the idea of the supreme good."

G. DAWES HICKS

UNIVERSITY COLLEGE, LONDON

A. THE PRE-CRITICAL METAPHYSICS AND ITS LOGICAL FOUNDATIONS

CHAPTER I

THE PROBLEM AS KANT ENCOUNTERED IT

KANT's early conception of God formed the keystone of a metaphysical structure that owed what solidity it possessed to two fundamental presuppositions which were deeply embedded in the metaphysics of Cartesian rationalism. The first of these was the view, characteristic of the rationalism both of Greek and mediæval philosophy, and bound up with the theory of the reality of entities corresponding to general concepts or of metaphysical substances, that the results of formal logic are ontologically valid, that is to say that the processes of logic unfold and express the nature of actual reality, and consequently that logical connection and real relations are ultimately the same. Characteristic of this way of thinking was the tacit identification of the notion of a substance and its qualities with that of a subject and its predicates, the predicates being regarded as contained in the unchangeably fixed notion of the subject. The second feature of the rationalistic metaphysics was the distinction drawn between necessary and contingent existence, or that which exists *per se*, and that which owes its existence to an ultimate being; a distinction which, in whatever form expressed, finds exemplification in the Augustinian grounding of the existent world in the will of God. These two presuppositions constitute in truth a house divided against itself, and the untenability of this form of rationalism became evident when it was realised that the admission of contingent existence is the denial that all predicates are necessarily involved in their subject.

The data of thought, according to Descartes, were certain innate ideas or "simple natures", that is to say, notions which are so clearly and distinctly apprehended that nothing can be conceived as more ultimate or more certain. The passage from these simple data to knowledge, in all its

variety and complexity, of the real world of existence (which consisted of modifications of these simple natures) is accomplished by intuition (together with deduction which Descartes regarded as a series of intuitions), a natural process of apprehension whereby the normal mind immediately recognises a necessary connection among different contents. Following his mathematical method, Descartes forthwith proceeded to think of the world of reality as known after the fashion of a huge geometrical system. The metaphysical ground of the Cartesian system was God, *ens summum et perfectum*, whose perfections (in the scholastic sense) in some way excluded the possibility of the will to deceive. "That all things which we may clearly and distinctly perceive are true is certain only because God is or exists, and because he is a perfect being."[1] Expressed in less scholastic fashion, this implies that if thinking is to be possible at all, we must believe that the contents of our understanding, all that we perceive clearly and distinctly, are parts or features of a logical system, which in its completeness is grounded in the perfect nature[2] of God. To regard all objects of the mind as interrelated concepts, however, is to render from the start all finite existents and real relations inexplicable. Concepts and their logical relations belong to the timeless realm of logic, while the distinguishing feature of finite existents and their connections is just their contingent and temporal character. In regard to the existence of finite things, Descartes could only call to his aid the notion of an extra-logical causal principle (manifested by *lumen naturale*) to bridge the gulf between concepts arising from the mind and the external objects to which these concepts refer. He could

[1] *Method.*, Pt. IV. Haldane and Ross, I. 105. Cp. *Medit.*, IV., and *Princ.*, XIII.

[2] Strictly in the *will* of God. Eternal truths are products of the divine will, valid only because God willed them to be, and although Descartes declares that God "understands and wills by one identical action" (*Princ.*, I. 23), so that he understands what he wills, and wills what he understands, yet a sort of primacy is assigned to God's will. The "eternal verities" do not follow directly from the nature of God, but are dependent on his will, each and every truth being a separate product with no necessary connection with any other.

not, of course, regard external things as the *causes* of our ideas, but he maintains that the "objective reality" of ideas is secured by the principle that "there must be at least as much reality in the efficient and total cause as in the effect". "In order that an idea should contain some certain objective reality, it must without doubt derive it from some cause in which there is at least as much formal reality as this idea contains of objective reality."[1] The cause, Descartes maintained, cannot be less than the effect. It must contain either more reality than, or just as much reality as, the effect. In the former case the cause (*causa eminens*) is related to the effect as the artist to a work of art, for in the artist more is contained than in his work. In the latter case the cause is related to the effect as form to its expression (*causa formalis*). Now if we find in our minds an idea which contains more reality than our own nature, it is clear that we are neither its *causa eminens* nor its *causa formalis*, and therefore not its cause at all. The cause of this idea must therefore exist outside us. In short, Descartes finds the ground of these ideas in God conceived as *ens realissimum*, that is as absolute existence or the totality of all possible predicates. But since the temporal existence of a finite thing does not follow from its essence, Descartes was compelled to fall back upon the Augustinian conception of the will of God as the sufficient reason, and indeed the efficient cause of finite existence. Likewise in regard to the connections of finite things, the only explanation he could offer was that God continuously modifies existing things in accordance with the systematic decrees of his own will. Thus the transition from timeless essence to temporal existence is accomplished only through the notion of an extraneous series of divine volitions, and this perpetual recreation renders the origin and continued existence of things contingent, and consequently involves the denial of any necessary connection among them. Malebranche's identifi-

[1] *Medit.*, III. Haldane and Ross, I. 162–3. Cp. *Princ.*, I. 17.

cation of the objects of the finite mind with essences in the divine intellect, and his contention that we see all things in God, was in fact the articulation of Descartes' assertion that "every clear and distinct perception must of necessity have God as its author".[1] Malebranche, like Augustine, brings subjective certainty into relation with the will of God, and renders the problem of real connection philosophically insoluble.

For Spinoza, too, the mode of connection among things was that of logical sequence, and the function of all reasoning was to connect everything with everything else in one complete system of logical dependence. According to Spinoza, the contents of scientific knowledge are certain *notiones communes* clearly and distinctly perceived and therefore true, which are the *ratiocinii nostri fundamenta*.[2] By deductive inference (regarded as inherently unerring) from these notions, the understanding apprehends not a complex of external things acting upon one another (the world of *imaginatio*), but apprehends reality under the form of necessary interconnections of content; not an infinite (and unintelligible) series of causes and effects, but the necessary consequents of the eternal nature of God.[3] Thus the identification of the principle of causality with the principle of ground and consequent, already latent in the philosophy of Descartes, is explicitly accepted by Spinoza, and Spinoza maintains, equally with Descartes, that knowledge is acquired by deduction from clear and distinct ideas taken to be ultimate. And since to say that "an idea follows in the human mind from ideas which are adequate to it" is the same as to say that "in the divine intellect itself an idea exists of which God is the cause in so far as he constitutes the essence of the human mind",[4] the *notiones communes*,

[1] *Medit.*, IV. Haldane and Ross, I. 178.

[2] *Ethica*, II. 44, C 2 dem. II. 40, S.1.

[3] *Eth.*, II. 44, C 2 and dem. Spinoza rejected the voluntaristic metaphysics of Descartes and identified God's will with his understanding.

[4] *Eth.*, II. 11 and 40.

together with the deductions therefrom, are metaphysically grounded in God.

But Spinoza succeeds no better than Descartes had done in making intelligible the transition from the realm of timeless essences to the realm of concrete existents. God is *causa sui* in the sense that he is a self-complete being whose essence involves existence, for *cuius natura non potest concipi nisi existens. Natura naturata,* or the modes of God's attributes so far as they are considered as having their being in God, is God regarded as the necessary consequent of his own free causality. The *essence* of the modes follows with logical necessity from the nature of God, the *causa essendi rerum.* But their essence does not involve existence. Yet Spinoza allows the existence of individual things, which are "nothing but affections or modes of God's attributes expressing those attributes in a certain and determinate manner".[1] As affections of God's attributes they are "in a sense" eternal and infinite. But in what sense? Not, indeed, as determinate existent things, but only as timelessly subsistent modes of the divine nature. Once Spinoza has granted that finite things have an individual existence, a particular mode of being distinct from the being of the ultimate substance, he is confronted with a causality wholly different from that which determines the essence and existence of the universe conceived as *natura naturata.* "An individual thing, or a thing which is finite, and which has a determinate existence, can neither exist nor be determined to action unless it be determined to existence and action by another cause which is itself finite and has a determinate existence; and again, this cause cannot exist or be determined to action unless by another cause which is itself finite and determined to existence and action, and so *in infinitum.*"[2] Of the things produced *immediately* by God, he is the proximate cause absolutely, and not *in suo genere.* Of the things which can

[1] *Eth.*, I, 25, Cor.
[2] *Eth.*, I, 28.

be accounted for only by reference to other particular things, God may be called the remote cause, so long as it be clearly understood that the totality of these particular modes follows from the nature of God as consequent from ground.[1] The relation of God to the finite particular existent mode then is clearly very different from his relation to the timelessly subsistent mode. In the latter case, the relation is unaffected by time, the nature of the particular mode must follow eternally from the nature of the ultimate substance. But the finite existent mode, while exhibiting infinite and eternal essence, appears in the phenomenal world as possessed of a determinate state of existence here and now, and its relation to the ultimate substance is anything but the timeless geometrical relation of consequent and ground. Spinoza is in fact forced to posit a relation of efficient causality so far as the *existence* of the finite modes is concerned.

Leibniz's formulation of the principle of sufficient reason marks the first movement towards the express recognition of the inadequacy of a merely logical ground of the facts of experience. Like his predecessors, he held fast to the doctrine that all necessary truths must be analytic, all predicates contained in the notion of the subject; but he explicitly recognised that the connections among existent entities are synthetic and contingent. He accepted the current conception of substance in so far as that he regarded a substance as that which could only be the subject of a proposition and not a predicate. A substance was forthwith taken to be a subject, and its attributes predicates of that subject. And since those attributes were conceived in scholastic fashion as the indivisible and unchangeable essence of that substance, every predicate was held to be comprised in the content of the subject. "The notion of an individual substance involves, once for all, everything that can ever happen to it, and in contemplating this notion we

[1] *Short Treatise*, Bk. I., Ch. 3. Cp. *Eth.*, I, 28, Schol.

can see all that can be truly predicated of it, just as we can see in the nature of the circle all the predicates that can be deduced from it."[1] No judgments other than those of the subject-predicate form, or reducible (as he thought relational propositions were) to that form, were allowed to be strictly valid, and only those propositions in which the notion of the predicate was contained in the notion of the subject were admitted to be necessary.

The relation in which predicates stand to their subject was, however, conceived by Leibniz to be twofold. In the case of *vérités éternités* the predicate follows deductively as consequent from the notion of the subject, while in respect of the *vérités de fait* the identity of predicate with subject can only be made out indirectly, through connection with other predicates. In regard to both, since all the states of the subject, past, present, and future, are contained in its notion, the criterion of validity was the principle of identity. But the strictly analytical judgment is concerned only with connections of content, with the relations of essences and species, and not of species and individual. Thus in the proposition "the equilateral rectangle is a rectangle", the existence of an equilateral rectangle is not affirmed.[2] Necessary propositions do not (except in regard to the special case of the notion of God) affirm the existence of their subjects.[3] On the other hand, all propositions about actual individuals (save God) are contingent; the affirmation of their opposites involves no contradiction. The utmost that can be done in regard to them is to apply the principle of sufficient reason, and to assign reasons for affirming them to be true. It would seem, then, that the law of contradiction (or identity)[4] is in itself a sufficient basis for truths of reason,

[1] Gerhardt's edition, IV. 436. [2] Ger. V. 343. [3] Ger. V. 429, etc.

[4] The *principium contradictionis* as formulated by Aristotle referred to the relation between *judgments*. It affirmed that the propositions S is P and S is not P cannot both be true. (*Met.* Γ3,1005b, 19.) From this principle nothing could be inferred as to the truth or falsity of any particular proposition. Leibniz sometimes renders the principle in the Aristotelian way, *de deux propositions contradictoires, l'une est vraie, l'autre fausse.* (*Théod.*, I. 44; Ger. VI. 127. Cp.

while truths of fact alone require the supplementary principle of sufficient reason. But the relation between the two principles is not so conceived by Leibniz. He defines the principle of sufficient reason in two ways. The more general form of the principle is that given in *De Scientia Universali*: "For every truth (which is not immediate or identical) a reason can be given, that is, the notion of the predicate is always involved in the notion of its subject, either expressly or implicitly, and this has its application not less in extrinsic than in intrinsic denomination, not less in contingent than in necessary truths."[1] In regard to analytical judgments or affirmations about the nature of possible things with no reference to the existence of their subjects, the principle of sufficient reason is simply a re-statement of the law that the predicate is always involved in the notion of the subject. Any judgment affirming a possible predicate of a possible subject is a truth of reason, and its sufficient reason lies in the identity of the predicate with the subject. In regard to such judgments, the principle of sufficient reason is a statement of the law of necessary connection in the realm of the possible, and that law, the affirmation that every predicate is involved in the notion of the subject, is grounded in the metaphysical doctrine of substance.

In its more restricted form the law of sufficient reason was stated as a principle of contingent existents, as for example in the Fifth letter to Clarke: "The principle in question is that of the need of a sufficient reason that a thing should exist, that an event should happen."[2]

v. Essais, IV. 2.) More frequently, however, appears the definition: "That which involves contradiction is false". (*Nouv. Essais*, I. 18. Cp. *De Scientia*, Ger. VII. 199, and *Monadol.*, 31–2.) Here the reference is to the relation between *concepts* in a single judgment; the contradiction is in the predicates, and the formula is A is not not-A. Thus Leibniz identified the principle of contradiction with the principle of identity (see Ger. IV. 357), and used it as the criterion of a valid judgment. The principle could hold good, however, only in so far as (*a*) the notion of the subject is completely known, and (*b*) a predicate is necessarily implied in its subject. Leibniz's merit consisted in the recognition of contingent truths to which the latter test is inapplicable.

[1] Ger. VII. 199, Erdmann's edition, p. 83. [2] Ger. VII. 419.

Thus stated, the principle is independent of the principle of contradiction. Leibniz conceived of existence as a predicate not contained in the notion of the subject, but in some way added to the latter. The existence of an individual subject is contingent. Moreover, although all predicates, past, present, and future, are comprised in the notion of the subject, and therefore follow necessarily from it, the "concrete predicates" (those which express states of a subject at particular periods of time), and also connections between the same, are contingent. There must be a sufficient reason for the existence of the actual contingent world and for the connections among concrete predicates.

The sufficient reason for the existence of the actual world Leibniz finds in God. "The ultimate reason for things is to be found in a necessary substance in which the variety of particular changes exists merely potentially (*éminemment*) as its source. . . . . This supreme substance, which is unique, universal and necessary, which is, moreover, *une suite simple* of possible being, must be illimitable and contain as much reality as is possible."[1] God is conceived not only as the source of existents, but also of essences in so far as they are real, that is, he is the source of whatever reality there is in the possible, for without such source nothing could be existent or even possible. From God's understanding follows the essence of things,[2] but not their existence. In the mind of God an infinite number of compossible universes subsists, but the real existence of one of them must have another source. Leibniz resorts to the Augustinian expedient of grounding the existent world in the will of God,[3] and the principle of sufficient reason now appears in the new guise of a *principium melioris*. The sufficient reason for the existence of the actual universe lies in God's selection

[1] *Monadol.*, 38–40.

[2] Cp. Descartes, *supra*. Leibniz's exposition strongly suggests, however, that the essences are logically prior to the divine understanding.

[3] *Théod.*, 7. *Monadol.*, 48, 55, etc.

of the best possible universe,[1] and since the entire history of the monad consists in unfolding what was implicit in it from the beginning, the *principium melioris* becomes the ground of the entire system of monadic development, the *lex continuationis seriei suarum operationum.*[2] Thus expanded, the principle of sufficient reason becomes indistinguishable from the assertion of a first cause of the real world.

Then the concrete predicates or states of a substance at particular periods of time are also contingent. True the state of the monad at any given moment is always the ground of the succeeding state, but the ground of change is not a necessitating reason (the opposite of which involves a contradiction) but an inclining reason,[3] the inclining reason being the perception of the good either by the substance itself, if it be free, or by God if the substance be not free. Leibniz was prone to rely on the principle of continuity in viewing the process of monadic development, but he had no solution to offer of the perplexing problem as to how from a simple substance the ever-changing varieties of experience flow. Quite apart from the question of free will, the really vital experiences in the life-history of the self-conscious monad remain unexplained, the experiences, namely, of forward and backward movements, of check, repulse, and new beginnings, and all those obstructions to development which appear to spring from any source save the monad's own being. Continuity there undoubtedly is, but it is questionable whether the continuity can be taken to be development in the sense intended by Leibniz. Leibniz, in fact, anticipating the theory of evolution current in the nineteenth century, accepted as a fundamental assumption that all development is *evolutio*, *Entwicklung*, an unfolding of something already contained within the subject. The lesson of modern biology clearly

[1] *Monadol.*, 53. Cp. *Théod.*, 8, 10, 44, 173, 196 ff., 225, 414–16; here the principle is called the principle of *determining* reason.

[2] Ger. II. 136.

[3] *De rerum orig.*, Ger. VII. 302.

is that no evolutionary view can afford to neglect the epigenetic character of organic development. But even in a case of pure *Entwicklung*, as, for instance, the unrolling of a melody on the cylinder of a gramophone, it seems impossible to maintain that nothing more than mere continuity is involved. Leibniz himself to some extent saw what is involved in the problem indicated. "I do not say that the subsequent state of the created being follows from its present state without the co-operation (*concours*) of God, and I am rather of the opinion that preservation is a continual creation with an orderly change."[1] And again, in a passage which is not altogether clear he hints at an explanation of the circumstance why one state of the world rather than another should flow from the one source: "It is manifest that from this source existing things continually come forth (*promamare*), that they are being and have been produced by it, since it does not appear why one state of the world rather than another, the state of yesterday rather than that of to-day, should flow from it."[2] Some explanation seems to be required of the precise order in which the states succeed one another, and that explanation according to Leibniz is to be found in God. The continual fulgurations[3] are not continual creations in the sense of a miraculous renewal from moment to moment as Descartes conceived, for that continuity upon which Leibniz everywhere relies demands that successive states are really continuous; but neither do the successive states flow from one another by absolute logical necessity. Rather are they continuous with one another, and all dependent upon the continuance of God's active choice.

Leibniz, then, like his rationalistic predecessors, grounded the existent universe on the will of God. He held that the law of non-contradiction was the true standard of know-

[1] *Lettre á Bourguet*, 1714. Erd. 722*a*. Ger. III. 566.

[2] *De rerum orig.*, Ger. VII. 305.

[3] *Monadol.*, sect. 47. Cp. Letter to Bayle, Ger. IV. 553. (*Il est le centre primitif dont tout le reste emane.*)

ledge. But since all is not clearly and distinctly perceived, we must have recourse to a principle of sufficient reason which, though conceived as co-ordinate with the principle of non-contradiction, is yet not an independent logical principle, but a principle metaphysically grounded. So considered, the principle of sufficient reason is Leibniz's rendering of the principle of causality. As metaphysical, again, the principle of sufficient reason opened up the possibility of a determination which was not merely logical, and which paved the way for the recognition of a principle of the determination of the actual, a principle which finally supplanted the rationalistic assumption of the ontological validity of general concepts.

I have been showing that along one line of reflection Leibniz tended to regard the principle of sufficient reason as subordinate to the principle of identity or contradiction. For, on the one hand, so long as actual existence is not in question the sufficient reason of a predicate is to be found in the notion of the subject. And, on the other hand, even in regard to existential propositions, since every real predicate is contained in the notion of the subject, a perfect knowledge of the subject would enable us to deduce all its predicates. Sufficient reason is, then, *ultimately* reducible to identity. The principle of sufficient reason considered as co-ordinate with the principle of contradiction springs from recognition of the fact that, although all possible predicates follow from the notion of a subject, the existence of "concrete predicates" is contingent, and that therefore truths of matters of fact can only be traced back through an infinite [1] number of equally contingent statements of fact.

Wolff's way of surmounting the antinomy we have been considering was summarily to subordinate the empirical to the logical. Since the notion of a subject contains all that can possibly be predicated of it, the law of sufficient reason

[1] In truth they ultimately found an arbitrary termination in the act of creation, an arbitrary act on the part of God's volition.

is a mere consequence of the law of contradiction, from which, indeed, he sought by an obvious *petitio principii* to deduce the principle of sufficient reason.[1] Everything that can be said to exist must, according to Wolff, conform to the principle of contradiction with its corollary the principle of sufficient reason. A thing is *determined* only when the affirmation of that thing follows with necessity from the affirmation of some other thing. Thus "as soon as it is affirmed that the sides of a triangle are equal, the angles also are affirmed to be equal",[2] and the connection is a comprehensible or intelligible connection. "*Ratio sufficiens saltem efficit, ut cur aliquid sit, intelligibili modo explicari possit.*"[3] Yet with that strange inconsistency with which he holds that philosophy is the science of the possible,[4] and at the same time appeals to that which is given in experience,[5] he maintains that the *Gründe* of things exist, in many cases, objectively in the actual world. We may be able to assign to a thing a *cause* without being able to fix its *ratio cognoscendi.* Thus we may regard magnetic force as the cause, but not the logical ground of magnetic attraction.[6] There may, indeed, be a whole world of things determined causally, and yet the ground of their determination may be unknown.

Two different modes of connection thus come to light, namely logical determination and a real *Ordnung*, or fixed relationship between things. In Leibniz's view the necessary connection in the world of things followed from his metaphysical principle of determination. Wolff, on the other hand, while clearly distinguishing between logical and real connection, regarded the latter as a species of the former, thus adhering to the rationalistic view that ultimately all grounds are logically determined.[7] Of all the principles of

[1] *Philosophia prima sive Ontologia*, 1736, sect. 66–70. Baumgarten advances the same argument (*Metaphysica*, p. 20), and it is exposed by Kant in the *Nova Dilucidatio*, Berlin edition, I. 397.

[2] *Ontol.*, sect. 115, p. 94. [3] *Ibid.*, sect. 321, p. 252.

[4] *Philosophia est scientia possibilium quatenus esse possunt.*

[5] *Ontol.*, sect. 129, etc. [6] *Ibid.*, sect. 71. [7] *Ibid.*, sect. 951.

determination,[1] the *ratio cognoscendi*, the principle of the logical passage from premises to conclusion, is primary. While, therefore, the basis of all the other principles appears to be a real connection or *Zusammenhang* of things, this *Zusammenhang* is itself a logical connectedness. Thus it is futile, he maintains, to point to a cause as "that to which a thing owes its existence", for one thing can be regarded as the cause of another only "if one can know from the one why the other is existent rather than non-existent".[2] Ultimately, then, real connection is reducible to logical determination, and Wolff's distinction between logical and real connection is employed solely within the limits of his rationalism.[3]

What, then, according to Wolff is the nature of the determination of finite things? True to the scholastic habit, he regarded everything as containing not only its constant essence and the attributes presupposed therein, namely *determinationes intrinsecæ constantes quæ semper eadem manent*, but also a number of variable *modi* (*variabiles quæ mutari posse*), which are not presupposed in the essence, but whose possibility is involved therein. Every change is a variation of *modi*. Such changes require a ground either in the subject (*substantia*) itself[4] or in another subject, according as the former is active or passive. The subject as active is the cause, and the alteration in the passive member of the relation is the effect.[5] The sufficient reason for the reality of an activity (*actio*) is called force (*vis*),[6] which consists in a

[1] Wolff distinguishes three principles or grounds of determination, logically prior to the *principiatum*. These are the ratio cognoscendi (per quam intelligitur veritas propositionis alterius); ratio essendi (in se continet rationem possibilitatis alterius); and ratio fiendi (ratio actualitatis alterius). To these are added the *principium internum*, which exists in the principiatum (e.g. the material is the internal principle and likewise the causa interna of the building), and the *principium externum*, which exists extra principiatum (e.g. the architect is the external *principium* and likewise the causa externa of the building). *Ontol.*, sects. 866–882.

[2] *Ontol.*, sect. 951.

[3] Not, of course, consistently. See, e.g., *Ontol.*, sect. 129.

[4] *Ontol.*, sect. 768. [5] *Ibid.*, 886. [6] *Ibid.*, 722.

continuous *conatus agendi*.[1] Since every single event is determined by all that has gone before, there is an endless chain of causes connecting every change with prior changes. Ultimately the truly real is that which is completely determined (*omnimode determinatum*), and complete determination is possible only in God, who is the sum of all realities that are actual. God is *a se*, or self-determining; the *ratio sufficiens* of his existence lies within himself. "Among possible things there must be one necessary self-existent being, otherwise something would be possible in regard to which no sufficient reason could be assigned why it is. This self-existent being we call God. Other things, which have the reason of their existence in this self-existent being, we call creatures."[2] In contrast with Leibniz, Wolff allows that the grounds of the varying states of a monad are not all to be found in the monad's inner being, but may lie in the being of other monads, and the difficulties are manifold. Thus a particular *vis* in a monad A is the ground of a certain activity producing an alteration in another monad B. The alteration that takes place in B has its ground in a *vis* which is grounded in the nature of A, and is therefore logically deducible from A at any point in its history. But the effect in B, if the causation is really transeunt, has a beginning in time, and prior to its coming into being other forces were operating upon B. There are here two fundamentally opposed notions. On the one hand, there is the notion of the logical dependence of all effects upon grounds resident in the subject, and, on the other, the recognition of empirical connections, temporal exchanges and interchanges of numberless forces which appear and disappear in a manner that defies all attempt at logical deduction. The purely logical character of the causal relation could be held with any sort of consistency only if the "forces"

[1] *Ontol.*, sect. 724.

[2] *Vernünfftige Gedancken von den Kräfften des menschlichen Verstandes*, 1725, *Vorbericht*, p. xi.

were centres of activity within the history of a truly individual monad and grounded in its very nature. Once allow that the *substantia* in any subject may be the ground of transeunt activities, and a monadology of the Leibnizian type avails no further.

One thing, however, must be placed to Wolff's credit: the "logical fanatic" brought the science of the possible to the breaking-point. He was an avowed rationalist to the end, yet he clearly brought out the distinction between *ratio* and *causa* (if only to attempt to show their ultimate logical oneness), and prepared the way for a clearer recognition of their difference by drawing the distinction between internal and external conditions. It was only his slavish adherence to formal logic that prevented his seeing that such a distinction contains the real problem of causality as it by and by revealed itself to Kant, the problem, namely, of the relation of actual objective dependence to intelligible connectedness.

Crusius, whose lead Kant largely followed[1] in the *Nova Dilucidatio*, has the merit of having exposed the futility of Wolff's attempt to confine the principle of determination to the domain of merely logical dependence. Crusius gave, in fact, a new turn to the discussion by drawing out the force of the distinction between real and ideal grounds. He urges[2] that the criterion of non-contradiction can never suffice for establishing a sufficient reason of a matter of fact. Given a certain fact, the question is what is its relation to other facts? Thus, supposing the opposite of an occurrence be conceivable, but that no place can be found for its *existence* in the nexus of existing events and things, of what use is the mere determination of the conceivability of that opposite?[3] "The principle of determining reason (*principium*

[1] Kant always spoke eulogistically of Crusius. E.g. Ber. I. 396: Perspicacissimos philosophos inter quos Crusium honoris causa nomino. I. 397: Celeberrimus Crusius. I. 398: Acutissimus Crusius, etc., etc.

[2] *Dissertatio de usu et limitibus principii rationis determinantis vulgo sufficientis*, 1743.

[3] *Ibid.*, sect. 6.

rationis determinantis) clearly cannot be deduced from the principle of contradiction. The latter principle is an identical proposition, and, therefore, in so far as it can be applied, reference is necessarily made to one and the same thing in one and the same respect and time. Accordingly, no question about causes and effects can be decided by means of it, but rather another principle different from it and independent of it must be assumed. Think of a certain thing A, and call its cause B. Forthwith you know that he who says that A arises (*oritur*) and is without cause certainly says something absurd and incredible, but not contradictory. He says that A arises, and that B is not and was not. To arise is to begin to be or to exist in some moment, but not to have existed in a prior moment. Where, then, is the contradiction? For he says that A is in the second moment, and was not in the first moment. I do not suppose anyone will have recourse to the view that the cause is already involved (*involvatur*) in the concept of the effect and *vice versa*. Whether effect presupposes cause is not in question; if it is posited *as effect* I grant that. But I desire to know whether A *is* an effect, and how I may be assured of this."[1]

Crusius, in truth, laid the foundation of the position ultimately taken up by Kant,[2] that the very possibility of a thing depends upon its finding a place in the texture of actual experience. The actuality of a thing or an event itself excludes all opposite determinations, its possibility (or conceivability) depends upon whether it can be linked with existing things. "*Alle wahre Möglichkeit hat ihren Grund in der Verknüpfung des möglichen Dinges mit gewissen existirenden Dingen.*"[3] The necessity of a thing is determined in the same manner. "*Nothwendig ist was dergestalt ist oder geschiehet, dass es nicht anders sein oder geschehen kan. Ein Ding wiefern es nothwendig genennet wird, auf gewisse Weise ist, und keine Ursache*

[1] *De usu*, sect. 14 abridged.

[2] Not, however, without vacillation. *Vide infra*, p. 195.

[3] *Entwurf der Nothwendigen Vernunft-Wahrheiten*, 1745, sect. 12. Cp. sect. 56.

da ist oder möglich ist, welche machen könnte, dass es nicht oder anders sey."[1] Philosophy, far from being the science of the possible, is the science of the real.

The definition of *Grund* as "that on account of which it may be conceived why a thing is thus and not otherwise" is accordingly defective,[2] and Crusius sets out to explicate afresh the meanings of the term *ratio* or *Grund*.[3] The first main division is that of moral ground and physical ground. Both these are divided into real grounds and ideal grounds. Further, there are two kinds of real ground, namely, cause (*Ursache*) and the principle of possibility; and two kinds of *Erkenntnisgrund*, namely *a priori* grounds, which enable us to understand the "why" of a thing or event, and *a posteriori* grounds, which enable us merely to know a thing or event as a fact (*Dass*). Crusius thus drives home the distinction between real and ideal grounds, a distinction which Wolff had indicated, but to the significance of which he never really attempted to penetrate. Crusius argued that if "ground" means that whereby we know why a thing is what it is rather than otherwise, we are adopting an unwarrantably narrow conception of "ground", for we are confusing real ground and ideal ground. In that case "real causes are defined not according to what they are in themselves, but according to something they represent in our minds under certain conditions. Hereby not only is attention diverted from their true nature, but there is afforded the opportunity of a hasty opinion by virtue of which one thinks that all truly adequate real causes must at the same time be adequate *a priori* grounds of knowledge".[4]

Now a thing may have an adequate ground, although this ground be not a determining ground.[5] Take any of the

[1] *Entwurf der Nothwendigen Vernunft-Wahrheiten*, 1745, sects. 120–1.

[2] "The word *ratio* is a slippery (*lubrica*) word, for since a *ratio* is that whence we know why (*cur*) anything is, it embraces the principle of knowing and the principle of the thing (*res*). . . . Is the sufficient reason an efficient cause (*causa efficiens*) or an ideal *principium cognoscendi?*" *De usu*, sects. 3 and 16.

[3] *De usu*, sects. 35–6. [4] *Entwurf*, ch. 3, sect. 38. [5] *Ibid.*, sect. 23.

objective causal connections which the sciences have discovered, and they will be seen to be empirical, i.e. they are factual and not logical. The logical ground is not something which has been arrived at independently of real conditions, it is rather a law generated from experience, and therefore *a posteriori*.

Thus Crusius gives a definitely empirical turn to the problem of determination. He lays stress upon the priority in time of the real connection in things existing quite independently of the principles of logical connection. Causal connection is, for him, quite separate from logical ground.

The actual causal connection is conceived in a manner similar to that of Wolff, save that an attempt is made to avoid the contradiction I have referred to. An effect B begins to exist by reason of an *activity* (*Thätigkeit*) in A, and further, given A, B follows necessarily, and cannot be otherwise. Accordingly, the force (*Kraft*) existing in A, by virtue of which something is effected in B, is regarded after the scholastic manner as a latent capacity, "a quality subsisting in the substance even where nothing is happening".[1] Herein it differs from Leibniz's conception of *vis activa*. For Crusius, *action* is "the state of a *Kraft* when that thing really happens which must be effected by the *Kraft* if that whereby the *Kraft* is imagined is really to exist or come into being".[2] A *Kraft* which is not yet active (*actu primo*) *is not less really present than when it is active* (*actu secundo*).[3] The *Kraft* can be brought into activity by reason of the fact that the activity of one substance can be the *Wirkung* of another.

Crusius's aim, apparently, was to avoid the thoroughgoing determinism which he took to be characteristic of the Leibnizian philosophy. He sought to establish the fact of freedom, particularly moral freedom. He thought it clear on *a posteriori* grounds that the finite mind is capable of

[1] *Entwurf*, sect. 59. [2] *Ibid.*, sect. 64. [3] *Ibid.*, sect. 66.

moral judgment and virtuous deeds, and that this entitled him to consider the possibility of unfulfilled *actiones*. In the conception of such *actiones* there is no contradiction; they are, therefore, possible, and their actuality can in part be proved. If it be urged that such a conception would lead to the conception of a caprice which would destroy all order in the world, the reply is that the action of a free will must always have an adequate *Ursache* in the idea of the reasoning mind. If, again, it be objected that the freedom thus constituted is indeterminate, since when it is effective it is not determined to express itself in one way rather than another, and being thus indeterminate is non-existent,[1] the reply is that the objector is falsely assuming that, to be determined, an action requires not only a sufficient *Ursache*, but also something else whereby it is determined, so that in every imaginable circumstance it can exist only in a certain way. But this cannot be proved.[2] Freedom possesses in truth all the inherent determinations proper to a completed *Kraft*, and its activity lacks none of the determinations necessary to an existent activity.

Like his rationalistic predecessors, Crusius retained the notion of *Grundkräfte*, but sought to mitigate the element of determinism by introducing the somewhat lame conception of a cause which is not a determining cause in the sense that it determines that the effect shall be thus and not otherwise, the conception, namely, of *bedingte Kräfte*, conditioned forces which come into operation by the chance connections of things with one another, and which are limited in various ways by those things.[3] There is here a definite movement toward empiricism, and although that movement is restrained by a lingering confusion of logical and real determination, Crusius rendered this service to the discussion of the question, that he emphasised the

[1] *Entwurf*, sect. 24. [2] *Ibid.*, sect. 83.

[3] E.g. No *Ursache* can be any more effective than the receptivity of the object permits. *Entwurf*, sect. 67.

distinction between logical and real ground, and prepared the way for the recognition of the problem of objective connection. This positive contribution placed Crusius in the direct line of philosophical advance, and incidentally furnished Kant with a starting-point.

CHAPTER II

THE PRE-CRITICAL CONCEPTION OF GOD

In his first metaphysical essay[1] Kant adopts the rationalistic assumption that everything predicable of a subject is involved necessarily in the notion of that subject. *Omnis nostra ratiocinatio in prædicati cum subiecto vel in se vel in nexu spectato identitatem detegendam resolvitur.*[2] In like manner he failed, as his rationalistic predecessors had done, to realise that the proposition "all necessary propositions are analytic" is not itself an analytical proposition.

The central theme of the essay is the question of the determination of reality, and it is characteristic of Kant that his point of departure was the datum of experience, and not the logically possible. As against the view that whatsoever involves no contradiction is possible, Kant urges that the principle of contradiction cannot be regarded as the sole (*unicum*) absolutely first principle or touchstone of all truths, for "if it be affirmative, it cannot be the absolutely first principle of negative truths, and if negative, it cannot take the lead among positive truths". The principle of contradiction is merely a definition of the impossible, for that which contradicts itself, or that which is conceived at one and the same time to be and not be, is just what is meant by the impossible.[3] If that which contains no contradiction is asserted to be possible, any predicates and any collection of predicates which are not self-contradictory will have to be allowed to be possible. Leibniz maintained that while any predicate taken by itself is possible so long as it is not self-contradictory, only those predicates which belong to one and the same possible world may co-exist; only the compossible is real. But by introducing the notion of compatibility and incompatibility among ideas Leibniz was

[1] *Principiorum primorum cognitionis metaphysicæ Nova Dilucidatio*, 1755.
[2] *Ibid.*, Ber. I. 391. [3] *Ibid.*

departing from his criterion of non-contradiction, which applied strictly to predicates taken by themselves. Leibniz was in fact introducing synthetic relations among predicates.

Kant was not, it is true, yet prepared to see what is here involved. He remained secure in the rationalistic presupposition that all reasoning is concerned with the discovery of the identity of predicate and subject, and he formulates the principle of identity thus: Whatever is is, and whatever is not is not. The underlying notion here is that the essence of a thing is fixed and unchangeable. What is is eternally; and, therefore, all that can be predicated of a subject can be derived analytically from it. It was, however, clear to him from the first that the principle of identity, although fundamental, is in itself formal and barren. The proposition, "Whenever identity is discovered between the notions of subject and predicate, the proposition is true", strictly amounts to no more than the formula A is A; it affirms that every concept is identical with itself. Where in fact the relation between subject and predicate is not one of numerical identity, the principle in question can in no wise serve as the bond of connection between them. Even in the case of the proposition "This three-sided figure is a triangle", where "the subject determines the predicate through its own perfect identity", there is involved a principle of determination whereby the connection between the subject and predicate is effected. Consequently, in addition to the principle of identity there is further required an autonomous principle of the ground of connection between subject and predicate. The principle of "sufficient reason" cannot be derived from the sterile law of contradiction. Kant rejects the term *sufficiens* as unsatisfactory, since *quantum sufficiat non statim apparet*,[1] and in its place he uses the term which at once raises the issues which Leibniz had before him when in his earlier writings he spoke of the "determining reason",[2] "To determine is to affirm a predicate

[1] Ber. I. 393.

[2] E.g. *Théod.*, sect. 44.

with the exclusion of the opposite. That which determines a subject in respect of its predicate is called the *ratio*".[1] *Ratio* determines the indeterminate; thus, for example, it is for us indeterminate whether the planet Mercury rotates about an axis or not, if we lack the *ratio* which affirms one alternative with the exclusion of the opposite. The term, however, has various significations. Regarding Wolff's definition: *per rationem sufficientem intelligimus id, unde intelligitur, cur aliquid sit*, Kant points out that "the little word why" (*vocula cur*) can, consistently with Wolff's general position, mean no more than *quam ob rationem*, which makes the definition tautologous. We must clearly distinguish, he thinks, between *ratio antecedenter determinans*, which is the *ratio cur* or *ratio essendi vel fiendi*, and the *ratio consequenter determinans*, which is the *ratio cognoscendi*. The eclipses of Jupiter's satellites supply the *ratio cognoscendi* of the rate of propagation of light, but they could never furnish the *ratio fiendi* or reason why (*cur*) it is what it is. The principle of determination as defined by Wolff was merely a *ratio consequenter determinans*, a mere logical unfolding of predicate from subject; but this helps us not at all to supply a reason *why* a finite fact is what it is, or why a certain predicate is connected with a certain subject in reality.

Under the influence of Crusius, Kant further distinguishes,[2] within the *ratio antecedenter determinans*, between *ratio veritatis* and *ratio existentiæ* (or *ratio actualitatis*). "In the former it is merely a question of asserting a predicate, the assertion being effected through notions involved in the subject either absolutely (*absolute*) or in an observed nexus, for there is disclosed only identity with a predicate, the predicate being inherent in the subject. In the latter the question concerns those predicates which are affirmed to be so involved, and examination is made not as to whether (*utrum*), but whence (*unde*) their existence is determined." Kant's position may be brought into clearer view by con-

[1] Proposition IV. [2] Ber. I. 396–8.

trasting it with that of Crusius. Taking the three principal grounds of determination enumerated by Wolff, viz. the *rationes cognoscendi*, *essendi*, and *fiendi*, Crusius drew a line of separation between the first and the other two, not by exalting the first in the manner of Wolff, but rather by depriving it of its privileged position, and making the ground of knowledge (*ratio cognoscendi*) co-ordinate with the real ground. We may thus tabulate his results:

Real grounds.

A. Cause—the grounds of all being and becoming.

B. Possibility—grounds of the possibility of the real.

Rationes cognoscendi.

C. a priori—which enable us to understand the "why" of a thing or event.

D. a posteriori—which enable us to know its existence as a fact.

Kant's scheme may be represented thus:

Ratio consequenter determinans, i.e. *ratio cognoscendi*, which is nothing more than a means of knowing *that* a thing is (Crusius's *D*).

Ratio antecedenter determinans (asserting the "why" of a thing or event);

(*a*) *Ratio veritatis* (or *essendi*), asserting logical relations (Crusius's *C*).

(*b*) *Ratio existentiæ sive actualitatis* (or *fiendi*), asserting the connections of contingent realities (Crusius's *A*).

By the illustration of Jupiter's satellites Kant had shown that the *ratio cognoscendi* is merely the ground of our knowledge *a posteriori*. Of far greater importance is the division which he makes within the *ratio antecedenter determinans*, for here (*a*) is the logical principle, whilst (*b*) indicates the problem which was soon to become uppermost in his thought, the problem of objective causal connection. He continued to regard all judgments as consisting in the unfolding of predicates from the notion of their subject, and, like Leibniz, he recognised under the head of analytical judgments two kinds, the necessary and the contingent. He explicitly drew attention to the fundamental difference between connections among timeless predicates and connections among existent realities. In regard to the former he was content to find

the *ratio* of the connection between subject and predicate in the principle of identity; in regard to existent realities a *ratio* must be found both for their existence and their mutual relations.

How, then, did Kant conceive the real in relation to the merely possible? Among contemporary writers there was no clear conception of the radical difference between the connection of compatible predicates in a possible subject and the connection of real predicates in an actual subject. Wolff, defining the possible as that which involves no contradiction,[1] had laid down the rule that *possibilitas ad existendum insufficiens*[2]; hence existence must be regarded as the *complementum possibilitatis*,[3] or that which is added to possibility in order that a thing may be brought *ex statu possibilitatis in statum actualitatis*. Wolff himself felt some hesitation about the matter, for he desired it clearly to be understood that the definition *complementum possibilitatis* was merely a nominal definition.[4] Kant dismisses this definition forthwith as *offenbar sehr unbestimmt*.[5] Again, Baumgarten had maintained that complete inner determination (*die durchgängige innere Bestimmung*) is the mark of the actual, for in an *omnimode determinatum* there remains nothing indeterminate as in the case of merely possible things. To this Kant replies[6] that there is but one kind of indeterminateness, namely the case where certain particular characteristics are not made out (*ausgemacht*), and indeterminateness in this sense is common to both the actual and the possible. The addition made by Crusius of the somewhere and somewhen (*das Irgendwo und Irgendwenn*) to the *untrügliche Bestimmungen des Daseins* helps us not at all, Kant thinks, in distinguishing the actual from the possible, for the distinctions in question apply to both. "The Wandering Jew himself must be in a possible space and a possible time."

[1] *Vernunft. Gedancken, u.s.w.*, p. 1. Cp. *Ontol.*, sect. 85, and Baumgarten. *Met.*, sects. 7–8.

[2] *Ontol.*, sect. 171. [3] *Ibid.*, sect. 174. Cp. Baumgarten, *Met.*, sect. 55.

[4] *Ibid.*, sect. 174. Cp *Logik*, sect. 191. [5] Ber. II. 76. [6] *Ibid.*

In general Crusius had maintained that all true possibility has its ground in the connectedness of the possible with existing things—things, that is, which are so determined by their own actuality that it is vain to look for any other mode of determination.[1] Kant is, however, emphatic that "*nihil contingenter exsistens potest carere ratione exsistentiam antecedenter determinante.* Affirm it to be without, there will then be nothing to determine it as existing except the existence itself of the thing. Since, therefore, its existence is none the less determined (that is, it is affirmed in such a way that every opposite of its complete determination is entirely excluded), there will be no exclusion of the opposite other than that which springs from the affirmation of existence. Now, since this exclusion is identical (for nothing else forbids that a thing should be non-existent than that its non-existence be removed), the opposite of its existence is *per se* excluded, that is, will be absolutely impossible. In other words, the thing will exist absolutely necessarily, which contradicts the hypothesis." This rather strained argument would, even if admitted, secure only a verbal victory over Crusius, for it is based upon a view of the "contingent" which he would not have accepted. In truth, Kant was here working out a doctrine of possibility which was destined later to occupy a central place in his metaphysics. His contention is that the notion of possibility arises from the presence of (*suppetere*) certain notions given (*dari*) to thought. The question as usually raised was which of all the variety of data thus present to mind belong to the realm of the actual or the necessary. The necessary, according to Baumgarten, was *cuius oppositum est impossible*, and the non-necessary was the contingent.[2] Thus the essences of things are absolutely necessary.[3] Kant points to the con-

[1] *Entwurf*, sect. 83. *Vide supra*, p. 37.

[2] *Met.*, sect. 101. Cp. Wolff, *Ontol.*, sect. 294: Contingens est cuius oppositum nullam contradictionem involvit, seu quod necessarium non est.

[3] *Ibid.*, sect. 106. Cp. Wolff, *Ontol.*, sect. 303: Essentiæ rerum sunt absolute necessariæ . . . cum in earum necessitate demonstranda non supponatur nisi definitio.

fusion here involved. He insists that far from "essences" taken by themselves being necessary, it is only when they meet in "things" that the notion even of their possibility arises. "The essence of a triangle, which consists of a conjunction of three sides, is not in itself necessary; for what sane person would contend that it is *per se* necessary that three sides should always be conceived as joined?"[1] The notion of possibility arises through "*collatio*", the logical process of assigning possible predicates to or excluding them from a subject. In the thought of a possible thing there are present to the mind a number of floating notions ("internal possibilities" in Wolff's phraseology), and by combination of these notions there results a further notion of a possible thing. The idea presented here, and further worked out in the *Beweisgrund*,[2] is that the merely possible, far from being the raw material, as it were, out of which existent fact is constituted, is a pure abstraction from actuality. The possible presupposes something actual (*setz irgend im Dasein voraus*). The idea of the possible is not even logically prior to the idea of the actual. It is out of the varied and ever changing data supplied by experience of the actual that there arises the notion of that which, although not immediately presented, is not known to be self-contradictory. The notion of the possible is posterior to the notion of the actual. Being, or fact, we may say is an irreducible synthesis of the possible and the actual. If the possible be conceived as a potentiality which exists prior to fact, there is no *a priori* reason why certain possibilities should be realised and others not, nor indeed why any of the incubated possibilities should be released in a world of actuality.

Now in regard to the "collatio" of predicates we must distinguish, Kant maintains, between relative (*relative, beziehungsweise*)[3] and absolute affirmation (*Position oder*

[1] Ber. I. 395.
[2] *Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes*, 1763.
[3] Ber. II. 73.

Setzung). In the case of the former, only logical conjunction is asserted in accordance with the principle of contradiction. Thus in the proposition "God is omnipotent", nothing is posited except the logical connection between the notion of God and the characteristic omnipotence. The proposition is not existential. Absolute *Position oder Setzung*, on the other hand, is the affirmation of real existence. The difference between an actual existent and a possible existent is not that the former has any additional predicate (*in einem Existirenden wird nichts mehr gesetzt als in einem blos Möglichen*). The difference is not as to what (*was*) is posited, but how (*wie*) it is posited.[1] We come, then, to the central contention of the two essays under consideration, that the inner possibility of things presupposes a being who exists necessarily.[2] "There is a being whose existence is prior to the possibility of itself and of all things; this being is therefore said to exist absolutely necessarily. He is called God." God is the *unicus, absolute necessarium possibilitatis omnis principium.* He is the sole (*unicus*) being because if the reality (which is in the floating notions) were distributed among a multitude of existent entities, the existence of these latter would in turn be limited and contingent, *privationibus nonnullis iuncta.* This reality must accordingly be united in one single being (*hæc realitas in ente unico adunata sit necesse est*). He is the

[1] Quite apart from the question of absolute *Position*, the doctrine that existence is no predicate was of great importance for the future development of Kant's thought. A predicate was simply a *Merkmal* already contained in the notion of the subject, and the significance of the assertion that existence is not a *Merkmal* is that it is here recognised that existential judgments do not rest upon an analysis of the subject, or as Kant himself says: Daher man auch, um die Richtigkeit dieses Satzes von dem Dasein einer solchen Sache darzuthun, nicht in dem Begriffe des Subjects sucht, denn da findet man nur Prädicate der Möglichkeit, sondern in dem Ursprunge der Erkenntniss, die ich davon habe. Ich habe, sagt man, es gesehen, oder von denen vernommen, die es gesehen haben (Ber. II. 72–3). Kant, however, did not yet see what is involved in synthetic judgments. He merely retreated to his position in the *Nova Dilucidatio* that all propositions are analytic, and warns us that the term "existence" can be safely used only so long as we do not attempt to derive existence from purely possible concepts.

[2] Ber. I. 395.

absolutely necessary *principium* of all possibility, because "if you take away God, not only all existence of things but even their internal possibility is absolutely abolished". In the *Beweisgrund* it is added that there is no inherent contradiction in the negation of all existence, but it is contradictory to maintain that some one possibility is, and yet that there is nothing actual; for if nothing exists nothing thinkable is given. "If I annul existence in general and thereby the ultimate ground of all that is thinkable falls away, all possibility likewise vanishes, and there no longer remains anything thinkable."[1] Kant's contention[2] is, then, that there is a certain actuality, the annulling of which would annul internal possibility in general. But that whose annulling or negation destroys possibility is absolutely necessary. Consequently there is a being who exists absolutely necessarily.

[1] Ber. II. 82.

[2] Compare the following passages from the *Nova Dilucidatio* and the *Beweisgrund* respectively:

Quicquid est in omni possibili notione reale exsistat.	Eben so muss in jeder Möglichkeit das Etwas, was gedacht wird. . . .
Porro omnimoda hæc realitas in ente unico adunata sit necesse est.	. . . die Data oder das Materiale in diesem Möglichen.
	das Reale der Möglichkeit.
Datur ens, cuius exsistentia prævertit ipsam et ipsius et omnium rerum possibilitatem, quod ideo absolute necessario exsistere dicitur. Vocatur Deus.	Die innere Möglichkeit aller Dinge setzt irgend ein Dasein voraus.
	. . . die Möglichkeit wegfalle . . . wenn kein Materiale, kein *Datum* zu denken da ist.
. . . id, nisi in Deo, omnis realitatis fonte, quicquid est in notione reale exsisteret, concipi plane non posset.	Wenn alles Dasein aufgehoben wird so ist nichts schlechthin gesetzt, es ist überhaupt gar nichts gegeben, kein Materiale zu irgend etwas Denklichen, und alle Möglichkeit fällt gänzlich weg.
Deus omnium entium unicum est, in quo exsistentia prior est vel, si mavis, identica cum possibilitate. Et huius nulla manet notio simulatque ab exsistentia eius discesseris.	. . . das Dasein Gottes als einen Grund. . . . Dasein, ohne welches selbst keine innere Möglichkeit stattfindet.

Before proceeding to consider the validity of Kant's demonstration of an absolutely necessary being, it will be well to inquire how far he succeeds in rendering intelligible the relation between that which exists *absolute necessario* and that which exists *contingenter*. So far he has contended that our thought starts from certain given elements (*notiones*) which are to be brought together (*conferenda*) in order that there may be things, and that these notions are collated in accordance with the principle of *ratio* which affirms (i.e. is the ground of) a nexus between certain qualities and a subject, or bearer of those qualities. These given elements "which are as it were the material of all possible conceptions" are reals (*realia*), yet *qua* distributed they are not ultimate reals, for in that case their connections in particular things would be accidental; they would be "limited", *hoc est privationibus nonnullis iunctam*,[1] and realities limited in this way plainly can have only a contingent existence. Consequently "that which is real in any notion cannot possibly be conceived to exist except *in God* the fount of all reality".[2] The difficulty is, however, to define the relation of these reals as existing in God to the reals *qua* distributed, to account, that is to say, for the existence of particular collocations of qualities or collections of "concrete predicates".

To express the nature of contingent things Kant uses the term *res* in the quite general way common among the metaphysicians of his day.[3] *Res* was the normal term for a

[1] Ber. I. 395. [2] Ber. I. 396.

[3] Ber. I. 396 ff. Cp. Baumgarten, *Met.*, sects. 36, 135-6, 248, and Wolff, *Ontol.*, sect. 243: Quicquid est vel esse posse concipitur, dicitur Res, quatenus est aliquid; ut adeo Res definiri possit per id, quod est aliquid. Unde et realitas et quidditas apud scholasticos synonyma sunt. Ex gr. arbor et ens dicitur et res; ens scilicet si existentiam respicis; res vero si quidditatem sive quod sit aliquid. Cp. *Ontol.*, sect. 442. A possible thing, a quality, is a res; so calor, frigus, densitas, raritas, refracto luminis, gravitas corporum gravium, effectus et vires causarum atque aliæ pæne innumeræ. Kant himself applies the term *res* to those mathematical notions with which the essences of a triangle must coincide (the notion of enclosing a space, etc.) (Ber. I. 395), and again to an act of free will (Ber. I. 397). It is significant, however, that when discussing the theory that an act of free will requires no determining ground, he uses the term *ens*, which in his own view is appropriately used only of the undetermined being, God.

contingent thing, and the notion in Kant's mind was clearly that of a substance in the rationalistic sense of the term. It denoted indifferently a subject with its predicates or a substrate with the qualities which inhere (*competere*) in it. Even when discussing the hypothetical "thing" considered as independent (*fac substantiam aliquam simplicem nexu aliarum solutam solitario exsistere*),[1] he maintains that its internal determinations are posited by, that is follow from, internal grounds with the exclusion of the opposite, showing that even a substance assumed to be independent must be conceived as a ground and bearer of qualities.[2] Now to "things" so conceived Kant freely applies the term *existere*, but their existence is contingent. A thing A is a manifold of qualities a, b, c, d . . . n, all of which are predicated of it in accordance with logical laws, and those qualities stand in relation to other qualities by being repugnant or contradictory to them. Further, A itself, thus determined, stands in relation to other things B, C, D . . . N. Every contingent thing is completely determined, the *omnimoda determinatio*[3] embracing the extrinsic as well as the intrinsic determinations (*tam internæ quam externæ*)[4]; it includes reference to the prior non-existence of the thing, for "that which determines that an existent thing did not previously exist has at the same time determined it from non-existence to existence".[5] A completely determined thing is a *rationatum* consisting of a unity of several determinations. Given the *ratio*, the existence of the *rationatum* is thereby assured.[6] The

[1] Ber. I. 410.

[2] Cp. Wolff, *Ontol.*, sect. 301.

[3] An *omnimoda determinatio*, according to Baumgarten (*Met.*, sect. 148), is a complexum omnium determinationum in ente compossibilium. A thing is said by Wolff (*Ontol.*, sect. 225) to be completely determined, in quo nihil concipitur indeterminatum, quo nondum determinato cetera, quæ insunt, actu esse nequeunt. Thus: Pone enti A inesse C et B, atque his positis actu inesse debere vel D vel E. Dicitur A esse omnimode determinatum si eidem præter C et B etiam insit D.

[4] Cp. Baumgarten, *Met.*, sects. 107 ff., and Wolff, *Ontol.*, sects. 143 ff., 160, 175, 312, 855.

[5] Ber. I. 397.

[6] Ber. I. 395. Cp. Omnimodæ determinationi, *hinc* nec existentiæ locum esse posse. Ber. I. 397.

former is the essence of the latter; the latter is the consequence of the former. "Whatever things are affirmed through a determining reason, those things must be affirmed at one and the same time with the *ratio*, for when a determining *ratio* is affirmed, it is absurd that the *rationatum* be not affirmed. Whatever, therefore, be the determinations in any state of a simple substance, with these all the *determinata* must at the same time be."[1]

Kant's further contention is that the *rationatum* requires an absolute ground, for, as he has argued, nothing is true without a *ratio*, and in no sense can the *omnimode determinatum* contain in itself the ground of its existence. This is the only account he has to offer of how the particular collection of qualities in an *omnimode determinatum* comes about, and it cannot escape attention that he here falls back upon the expedient of a first cause itself uncaused, a notion which he expressly repudiates as contrary to sense (*absonum*).

Kant, then, uses two arguments for the existence of an absolutely necessary being: (*a*) the argument from possibility in general, and (*b*) the argument from contingently existing things. In the *Beweisgrund* these are denominated respectively the ontological and the cosmological arguments. In each case the exact significance of the argument is brought out by contrast with a spurious form of argument. The ontological argument as formulated by Descartes, the argument namely "from the possible as ground to the existence of God as consequence", is rejected because existence cannot be comprised in the possible as a predicate. Neither here nor in the *Critique of Pure Reason* did Kant do full justice to the Cartesian argument. That argument had this in common with the argument here advanced, that it was based ultimately upon the inconceivability of the non-existence of God. The non-existence of the infinite was

[1] Ber. I. 411. Cp. Wolff, *Ontol.*, sect. 115. Positis adeo determinantibus ponuntur quoque determinata hoc est quam primam determinantia sunt, determinata quoque sunt. Quam primum ponitur latera trianguli æqualia esse debere anguli quoque æquales esse ponuntur.

declared to be a self-contradictory notion, since that which contains all perfections must necessarily exist. Kant is content to urge that one may as well argue that a perfect world exists in reality because it is conceivable. Existence is no predicate; there is no more in actual things than in possibilities. We cannot pass from a concept to the affirmation of existence. But, he maintains, we can and must pass from the inner possibilities of things in general to an absolute positing,[1] the affirmation of the existence of that which makes possibility itself possible. For Kant the inconceivability of the opposite of the divine existence was grounded upon the necessity of some one existent being as the presupposition of all possibility. This is clearly stated in a *Reflexion* belonging to this period: "Possibility appertains necessarily to things, the possibilities of things have, therefore, no further ground; but a being is necessary whereby possibilities are provided. In reference to this every possibility is but a limitation of the ultimate reality, and complete possibility is actually the relationship to the ultimate reality in its determinations. The ultimate being itself cannot be regarded as possible, but is rather the *principium* of possibility. . . . The necessity of the existence of this being required no special proof. The fact that it is the ground of all possibility, and that possibility is only a derivation

[1] Unless this contention be recognised as central for Kant the whole argument in the *Beweisgrund* will appear confused. Professor Ward (*Study of Kant*, pp. 13–17), for example, regards it as an incoherent performance. He takes the propositions "Existence is no predicate" and "Existence is the absolute positing of a thing" as fundamental, and Kant's third proposition "All possibility implies something actual" as a sort of corollary to his two main propositions. In truth, however, it is the third proposition that is fundamental. The proposition "Existence is the absolute positing of a thing" is affirmed in the provisional manner which Jachmann has shown to have been characteristic of Kant's later mode of exposition. Kant certainly used the term existence of contingent things, but not in the sense of absolute positing. The main theme of his earlier essays is the contrast between that which exists *contingenter* and that which exists *absolute necessario*. Contingent things owe what existence they have to the *Inbegriff* of all reality. By absolute *Position* he intended the affirmation of the real ground which furnishes the material of that which is given in experience. "That which is real in any notion cannot possibly be conceived to exist except in God, the fount of all reality." Ber. I. 396.

from it, signifies as much as 'nothing is possible without a *realissimum*', consequently this being itself does not find place among merely possible essences."[1]

The true significance of the "ontological" argument, according to Kant, is that we must affirm the existence of God as the presupposition of all possibility and of all determination. As such God requires no *ratio determinans.* He is declared to exist because the opposite of his existence is unthinkable. The impossibility of the opposite is indeed the *ratio cognoscendi exsistentiam,* but such a being can have no *ratio antecedenter determinans. Exsistit: hoc vero de eodem est dixisse et concepisse sufficit.*[2] If, however, Kant bases his argument for the inconceivability of the non-existence of God upon the contention that all reality must exist in an absolutely necessary being, and that the *Inbegriff* of all reality alone exists with absolute necessity, this is practically equivalent to the Cartesian argument that "that which contains all perfection (or reality) must necessarily exist". And so much is true if anything at all exists. That is to say, the absolute necessity of the unconditioned is based not upon the absolute impossibility of its non-existence, but on the contention that there exists something contingent which presupposes the existence of the absolutely necessary. Ultimately Kant's case here stands or falls with his doctrine of the absolutely necessary ground of contingent reality.

Turning to the "cosmological" argument, Kant finds a true and a false inference from the *Erfahrungsbegriffe des Existirenden* to the existence of a first and independent cause. In the argument as formulated by Wolff there were two stages, to the first of which alone Kant assents, the affirmation, namely, that *wenn etwas da ist, so existirt auch etwas was von keinem andern Dinge abhängt.*[3] But the second step, the assertion of the absolute necessity of this independent being, is much less certain, seeing that it is governed by the principle of sufficient reason which is still in question. Kant regarded

[1] Erdmann, II. 1583. [2] Ber. I. 394. [3] Ber. II. 157.

it as *absonum* that anything should have the ground of its existence in itself, and would not say with Wolff, *ens igitur a se existit quia possible.*[1] Yet he is clear that there *is* a passage from that which we encounter in experience to the existence of a supreme ground. When contemplating the individual *res* from the point of view of its external determination, the element of time naturally comes to the fore, and the relation between God and the finite thing is then considered less as a relation of a direct consequence following immediately[2] from an ultimate ground than of a concatenation of effects from one ultimate cause. "By reviewing the chain of events, which, as Chrysippus says, once for all rolls and winds through an agelong series of consequents, the sole ultimate *ratio* of events and the fertile *ratio* of so many consequents is found at last in the first state of the world, which directly exhibits God as creator; from which *ratio*, when affirmed, others are derived, and others from them, throughout the ages that follow, by an ever fixed law."[3]

Now these two lines of consideration along which Kant advances in his demonstration of the existence of God involve two quite different notions of the relation between God and the world. On the one hand, God is conceived as the systematic unity of that reality which is the material of all possible, non-contradictory notions. God is the all-embracing essence, the ultimate ground from which all consequents follow. From this point of view the difficulty confronting him was the difficulty which beset Spinoza and Leibniz, the difficulty, namely, of rendering intelligible the transition from an absolute unity to a contingent, but nevertheless existent multiplicity, and of accounting for continuous change among existent things. The contingent thing is declared to be a *substance*, and as such its essence is unalterable, and it possesses an existence independent of other substances (save God). Yet this multiplicity is not

[1] *Theologia Naturalis*, 1736, sect. 34.
[2] "*Simul*", Ber. I. 411.
[3] Ber. I. 399.

absolute; the manifold things are bound up with one another, and their very contingency compels us to seek for them a single ultimate ground which shall serve as the unity of all determinations. Thus by the principle of co-existence the reciprocal relations between finite substances are preserved by reason of their common relation to the divine understanding. The relative independence of finite substances, together with their changes, are taken to be due to the reciprocal action of inner factors of the ultimate essence. In other words, the relations of finite substances to one another follow from the ultimate essence only indirectly; it is the totality of the chain of events and conditions that results directly from that essence. Yet, qualified as it is, the multiplicity of existent contingent things stands in contrast with the unity of the ultimate substance in the same way that the finite modes, in so far as Spinoza attributed to them determinate existence, stood over against the *natura naturans* which was intended to embrace within itself all modal reality. Hence, side by side with the concept of God as ultimate ground from whom all else follows as logical consequent is the concept of God as creator of substances in respect of their existence and their mutual relations. Kant had at this stage no clear conception of what was implied in the notions of *ratio* and *causa*, hence God is conceived by him as alike the logical ground and the producing cause of the existent finite world. The ground (*ratio*) itself is denominated a producing agent, *quæ ad illud producendum requiritur ratio.*[1] The creation of the world is conceived now under the category of immanent and now of transeunt causality. In accordance with the latter notion God is freely described as the first cause of finite things and events.[2] Yet the act of creation is intended to mark

[1] Ber. I. 399. Cp. *Beweisgrund*, Ber. II. 101, "*wirkliche Hervorbringung*".

[2] Ber. I. 399: The first state of the world exhibits God as creator. Ber. I. 403: The finite world is a web which God began and which is woven conformably with his first example. Ber. I. 404: God in determining the origin of the things of the universe *started* (*inchoavit*) a series . . ., a fixed nexus of

the transition not from a first member to the rest of a series, but from an absolute ground to contingent realities.

This absolute substance stands outside the sphere of determination which implies exclusion and negation (*Determinare ist ponere cum exclusione oppositi*)[1]; he requires no *ratio*. It is nonsense to say that he has posited in himself the ground of his own existence; he is the presupposition of all determination. But although infinite, he is not without determinations (*quæ ipsi competunt determinationes*).[2] Such determinations cannot, however, in the case of an absolutely independent substance be affirmed with the exclusion of the opposite, for there are no "opposites" outside the *omnitudo realitas*; opposites must spring from his own nature; hence Kant had affirmed that the existence of an absolutely necessary being is prior to the possibility not only of all things (*omnium rerum possibilitatem*), but also of himself (*et ipsius*). The absolute substance, or God, must therefore be conceived as the ultimate ground which is in and for itself—the *ne plus ultra*. He is in no sense the first member of a series; he exists *non propter rationem sed quia oppositum cogitabile plane non est*; and, as Baumgarten lays it down, *cuius oppositum in se impossibile est, est illud necessarium in se* (*metaphysicæ, intrinsecus, absolute . . . logice*).[3] It is at this point that the metaphysical character of the principle of determination comes clearly to view. Kant had said of those who affirmed that God has the cause of himself concealed in himself that "when in a chain of reasons you come to a beginning it is thereby clear that you have come to a stop, and the inquiry is obviously brought to an end by the answer

reasons bound together connectedly and interdependently. Cp. *Beweisgrund*, Ber. II. 101. Das Dasein aller dieser Wohlgereimtheit . . . ist mit ihren Folgen der Willkühr der ersten Ursache beizumessen. Cp. Ber. II. 123 ff.

[1] In his case the opposite is not excluded; no opposite is *present* or given (*suppetant, datur*); i.e. his opposite is inconceivable (*oppositum cogitable plane non est*).

[2] Ber. I. 412. Cp. Baumgarten, *Met.*, sect. 845. Deus est actu, quicquid esse potest qua perfectiones internas. Denuo patet, deum esse interne immutabilem. . . .

[3] *Met.*, sect. 102.

being completed".[1] Kant claims to have avoided that error, not indeed by a logical proof that God is the ultimate ground of which all other things are consequents, for that is impossible, but by the metaphysical postulate that such absolute ground is also a necessary presupposition if the world of contingent reality is to be rendered intelligible.

Kant evidently thought that such a logical relationship between the absolute ground and finite consequents was not inconsistent with the view of an act of creation giving a *start* to a series. But it is not clear how from God, conceived as the absolute reality existing in and for himself, there can emanate a world of separately existing things.[2] And so, side by side with the doctrine of creation in the sense of giving a start to a series, is the thought of God as expressing himself in the world of created things, as existing indeed in them. Whatever is real in given notions, the material of all possible conceptions, the *omnimoda realitas* is brought to a unity in one being (*omnimoda hace realitas in ente unico adunata sit necesse est*)[3]; and further, these reals (*realia*) must *constitute* the infinite being (*ens constituant infinitum*).[4]

Even if we abandon the idea that the act of creating the world took place at a moment in time, and regard the created world as following eternally from God, we shall still find that Kant's treatment of the problem of the One and the Many takes us but little further than that of his rationalistic predecessors. Let empty space be regarded as the sphere of the divine self-manifestation, *das Feld der Offenbarung göttlicher Eigenschaften*,[5] the ὑποδοχή or receptacle into which God places created things (*stabiliverit, firmaverit*), yet the relation of created things to God appears to be anything but a relation of consequent to ground.

[1] Ber. I. 394.
[2] Cp. Leibniz's emanations, fulgurations, etc., *supra*, p. 31.
[3] Ber. I. 395. [4] *Ibid.*
[5] *Allgemeine Naturgeschichte, u.s.w.*, Ber. I. 309. Cp. p. 262.

Spinoza left entirely unexplained the *existence* of finite individual things standing over against the world of essences. Leibniz relied upon the metaphor of "fulgurations" to make the transition from God to the finite monads. Both made use of a conception of activity in order to give definiteness to the notion of individuals as substantive realities. Wolff, with less subtlety, defines creation as the act of God, whereby he confers, by reason of his power, reality upon those things which were possible by reason of his understanding.[1] And in like manner Kant, in the third section of the *Nova Dilucidatio*, leaves the logical connection of subject and predicate far behind, and contemplates finite things as substances standing over against the ultimate substance. Since the determinations of the finite substances follow as consequents from ground (in accordance with the principle of succession), their changes cannot be effected through connection with other substances. Every finite substance exists in separation from every other. Yet because everything in the universe is mutually connected, all finite substances must be considered (in accordance with the law of co-existence) to spring from a common cause, God, as regards both their existence and their reciprocal relations (*in modo communis a Deo dependentiæ*).[2] The continuous changes in the finite world can be explained only in so far as they are regarded as reciprocal activities which, in their totality, follow necessarily from the one unchangeable ground which is their unity.

Such, then, is the solution which Kant here offers of the problem of the many and the one, of the plurality of finite things and the unity of the absolute substance. The one substance *manifests*[3] itself in finite ways. The dividing limits in the finite world are not absolute limits in the ultimate substance. Created things are merely ways in which the ultimate substance appears. The ultimate ground is of

[1] *Vernünftige Gedancken*, sect. 1053. [2] Ber. I. 413. Cp. *Allg. Nat.*
[3] Ber, I. 404.

necessity unchangeable as such, yet the fact of mutual changes in the world of finite things is undeniably certain.[1] Every activity in the contingent world is a direct and necessary consequence of the one unchanging ground, and there is nothing in the *rationatum* that was not in the *ratio*. Finite substances are, therefore, like Spinoza's modes "in a sense eternal", and consequently constant and unchangeable. Kant's way out of the contradiction is to introduce the conception of continuous creation—the self-manifestation of the ultimate substance through finite things. These finite things, though *substantiæ*, and quite distinct from one another, are in a relation of common dependence within the whole, and their reciprocities are but the expressions of the unfolding of the one ground. Changes in the world are conceivable only as modes of appearance of the unchanging substance, they take place within a system which itself is unchangeable. Kant conceives that he has disposed of the theories of pre-established harmony, occasionalism, and an *influxus physicus*.[2] Finite things are at once relatively independent and mutually reciprocal. They are with respect to other finite things independent, inasmuch as every finite substance has its own inner determinations, and is determined solely by them so far as its nature is concerned; they are mutually reciprocal inasmuch as their mutual influences are determined, created, and sustained by the divine understanding.

Thus in this, his first philosophical attempt, Kant was in large part defending positions which later it became one of his main objects to exhibit as untenable. In 1755 he moved with less caution than Spinoza and Leibniz from the conception of *ratio* to that of *causa*; from the notion of a supreme logical ground to the notion of God as an active,[3] producing, sustaining agent; from the notion of contingent things as *prædicati* to the conception of them as

[1] See especially *Sectio III.* 1, *Usus*, 1, Ber. I. 411, on real existence.
[2] Ber. I. 412. *Usus*, 2. [3] *Allg. Nat.*, Ber. I. 309. *Kraft, Wirksamkeit*, etc,

In short, he had not yet seen the essential contradiction which pervaded the contemporary rationalism, the contradiction involved in the attempt to maintain on the one hand that God is the one and only (*unicus*) being, absolutely complete in himself, of whom contingent things are determinate modifications; and, on the other hand, that contingent things enjoy an individual existence different from the being of the one ultimate substance.

CHAPTER III

FROM RATIONALISM TO CRITICISM

ONE of the main problems of the Cartesian philosophy was to show how a material realm the essence of which is pure extendedness, and a spiritual realm the essence of which is pure thought, together form one coherent whole. Between these two there is apparently no conceivable connection, hence the contents of thought cannot be regarded as "given" to the mind, but must be conceived as arising from the mind itself. In strictness, one might say, the concept was the only *datum*, and the understanding came to be viewed as a process of intuiting logical relations among the contents of ideas. In the *Nova Dilucidatio* Kant closely follows the rationalistic tradition. As he there views the process of perception the mind is subject, through means of internal sense, to internal changes, and since these changes cannot arise from its own nature considered in isolation, other things outside the mind must be present with which it is related. Yet it was equally apparent that change in perception takes place in conformity with external motion as Crusius had shown. A human mind, apart from a real nexus of external things, would be incapable of changes of internal state. Kant's teacher, Martin Knutzen, had maintained[1] that while the mind undoubtedly has the power of moving the body and the body of affecting the mind, yet the mode

[1] *Commentatio philosophica de commercio mentis et corporis per influxum physicum explicando*, 1735. The most important contentions are the following:

Section 39. Mens humana in corpus suum agit ac corpus vicissim in mentem.

Section 21. *Agere* dicitur ens, quando rationem in se continet existentiæ mutationis cuiusdam rei.

Section 40. Datur influxus physicus mentis in corpus ac corporis in mentem; ac systema influxus physici vera est ac sufficiens commercium mentis ac corporis explicandi ratio.

Section 41. Influxus physicus non est terminus inanis neque qualitas occulta.

Section 44. Corpus in mentes agit in systematis physici influxus . . . modo vim mentis eiusdemque substantiam tali ratione modificat ut repræsentatio in mente oriatur.

of this power of effecting movement is of a kind not precisely determinable by us. An *influxus physicus* of a kind there undoubtedly is, he contends, but it is not the case that "the thoughts and perceptions of the body impregnate the soul drop by drop", but rather that "the body only modifies the power of the soul and its substance in such a way that a presentation arises in the soul". Dissatisfied with Knutzen's conclusions, Kant claims to have disposed of the last remnant of an *influxus physicus*, and to have rendered the connection between body and mind intelligible by the application of the principles of succession and co-existence. The former enables him to hold that changes of perception take place in conformity with external motion, the latter that these changes are possible "only in virtue of a *nexus* in which they are joined in the idea of an infinite being"; not indeed through an artificial pre-established harmony, nor through a "continuous influx of God", but "a mutual intercourse is established through those determinations which are involved in the origin of their existence". Anything like a mechanical impression is, therefore, rejected. The inner condition of the soul is a *status repræsentationis universi*; the soul, inseparably bound up with a body, gets the material of its ideas not as physical impressions of body upon mind, but from the impressions which are aroused in the soul by means of the body; not as effect from bodily motions, but in conformity with external motion; and this material or *datum* is that from which alone all possible conceptions take their rise. Now the *data* in this sense being present, progress towards full and complete conceptions takes place along the lines laid down by the logical laws expounded in the earlier sections of the *Nova Dilucidatio*. The function of the mind (*spontaneitas*) is to bind given notions together.[1] Yet Kant did not at this time question the current assumption of the analytical nature of all know-

[1] Notiones suppetant . . . unde resultet postea combinando, limitando, determinando notio quævis rei cogitabilis. Ber. I. 395.

ledge. A predicate is connected with a subject always on the basis of a determining *ratio*, but the function of the determining reason is to disclose (*detegere*) the identity subsisting between them. At this early stage, he saw that the identity was not of the same kind in all cases. On the one hand, there are instances of "complete identity", in which the predicate is manifestly obtained by analysis of the notion of the subject. On the other hand, there are propositions in which the predicate, although pertaining to the notion of the subject, is not directly and necessarily contained in that notion. The former is, of course, the analytical judgment, and the latter the synthetical judgment of the *Critique of Pure Reason*, but neither in the *Nova Dilucidatio* nor in the *Beweisgrund* were the two thus distinguished. As yet, he had drawn no clear distinction between the *connexio rerum* and the *connexio idearum*. "All our ratiocination is resolved into the discovery of identity of a predicate with a subject", and the *ground* which establishes the connection between a subject and a predicate by disclosing their identity is conceived and defined within the same grammatico-logical realm.

The first step toward the recognition of the non-analytical character of many of our judgments was taken in the essay on *Die falsche Spitzfindigkeit der vier syllogischen Figuren*, in which a distinction is drawn between judgments based upon pure identity and judgments based upon direct experience. The germ of the dictum *Gedanken ohne Inhalt sind leer* is here foreshadowed in the assertion that our judgments are based upon *Vorstellungen* which arise *von der Sache selbst*, and that "the whole of the higher faculty of knowing" rests solely upon "the faculty of our inner sense", the faculty, namely, of making our *Vorstellungen* the objects of our thoughts. Defining judgment then as the recognition of something as *ein Merkmal eines Dinges*, Kant maintains (as against Meier)[1] that all judgments in which insight into the identity

[1] The essay was apparently provoked by a perusal of G. F. Meier's *Versuch eines neuen Lehrgebäudes von den Seelen der Thiere*, together with the *Vernunftlehre*

or contradiction between a subject and a predicate is obtained by direct experience, "and not by analysis[1] of the concepts" are indemonstrable (*unerweislich*). Human knowledge, he declares, is full of such judgments. "Some of them precede every definition, since in order to arrive at a definition we must represent to ourselves as an attribute of a thing that which in the first instance we *immediately cognise* in the thing." The certainty of such empirically founded judgments lies in the given sensations and their perceived relations, and the "*collatio*" of certain predicates rests upon immediate apprehension through the act of judgment. This is a notable advance upon his earlier view of reasoning. The "night which o'ershadows our intelligence" and renders our reasoning inevitably an analytical process (in the restricted sense already noted) is now relieved by not a few bright stars, to wit these specially privileged indemonstrable judgments in which identity or disagreement is not disclosed by means of "analysis of concepts".[2]

The competition essay,[3] which claims to move wholly within the realm of the *sichere Erfahrungssätze*, declares that these indemonstrable judgments lie at the basis of all our reasoning—mathematical as well as metaphysical.[4] Mathe-

and *Auszug aus der Vernunftlehre*. Kant used the last named as the basis of his lectures, and his notes written thereupon became the material whence Jasche compiled Kant's *Logik*.

[1] By the term "analysis" Kant here means the process of disclosing identity or contradiction by means of a *nota intermedia*. Thus, e.g., the judgment "a triangle has three sides" would not, in this present connection, be regarded as an analytical judgment.

[2] Kant here recognises three types of such judgment: (*a*) judgments of direct experience, e.g. that a body is impenetrable, (*b*) the identical judgments previously recognised, and (*c*) the self-evident rules of the syllogism. He did not yet see that judgments of the second type alone are entitled to be regarded as analytical. Moreover, had he followed the clue suggested by Meier that *die unerweislichen Urtheile . . . a priori sind* (*Vernunftlehre*, sect. 348), an assertion which to be sure Meier meant to apply only to identical judgments—and recognised the third type of judgment as synthetic *a priori*, his sojourn in the wilderness might have been considerably shortened.

[3] *Untersuchung über die Deutlichkeit der Grundsätze der natürlichen Theologie und der Moral*, written 1762, published 1764.

[4] Ber. II. 296.

matics, which is concerned only with the relations of concepts and creates its objects synthetically, uses but few *unauflösliche* concepts,[1] and these are sufficiently clear and precise for its purpose. Metaphysics, on the other hand, is confronted at the outset with a vast array of complex notions out of which it must analyse the simple indemonstrable judgments from which they were derived. Thus the concept of goodness is built up from many sensations (*Empfindungen*) of goodness. The concept of touch "arises originally from feeling . . . from the observed resistance of the impenetrable, and only by reason of this observed resistance do I form the indemonstrable judgment that I am touching a body". The preliminary task confronting Metaphysics was thus nothing less than the piecemeal analysis of the whole realm of our *Erfahrungsbegriffe*. "*Jedermann hat z. E. einen Begriff von der Zeit; dieser soll erklärt werden. Ich muss diese Idee in allerlei Beziehungen betrachten, um Merkmale derselben durch Zergliederung zu entdecken, verschiedene abstrahirte Merkmale verknüpfen, ob sie einen zureichenden Begriff geben, und unter einander zusammenhalten, ob nicht zum Theil eins die andre in sich schliesse.*"[2] This, of course, implies the abandonment of the attempt to assimilate the method of metaphysics to that of mathematics. "It is not yet time to proceed synthetically in metaphysics; only when analysis has helped us to concepts distinctly and fully understood will synthesis be able, as in mathematics, to subordinate the most complex cognitions to the simplest."[3]

Having relinquished the method of rationalism, Kant came to see the fundamental difference between logical and real relations. The first step was taken when he attempted to characterise the ultimate substance. The *Allgemeine Naturgeschichte* viewed all things, after the fashion of Malebranche, as existing in God; and in the *Nova Dilucidatio* the

[1] Der Begriff der Grösse überhaupt, der Einheit, der Menge, des Raumes, u.s.w.

[2] Ber. II. 276-7.

[3] Ber. II. 290. Cp. *Kritik d.r. V., Vorrede*, A 4 ff. = B 8 ff., and *Methodenlehre*.

predominant idea of God was that of the *Inbegriff* or *schema* of the reality of all possible notions,[1] for notwithstanding the doctrine of creation, the finite world was regarded as a consequent of a ground. The little rift within the lute came to view in the case of an act of will for which the moral agent is held to be accountable, and in this connection a clear distinction was drawn between *determinations* of God and *consequents* which point back to God as their first ground. In the *Beweisgrund* the ultimate being is characterised as spirit (*Geist*) on the ground that he cannot be less than understanding and will *und alle Realität der geistigen Natur.* In consequence, the things of nature and their connections were attributed to the will of a supreme originator (*der Willkühr des obersten Urhebers*); and, as such, were not to be regarded as predicates or determinations of God, but as collateral consequents (*Nebenfolgen*) which unite in one great chain (*Kette*) the parts of the created world.[2] Further, in order that the order and beauty in the world may be rendered intelligible, there must be presupposed not merely an *understanding* in which the data are grounded, but also "a *will* that executes". This involved two important changes in Kant's notion of the relation between God and the world. In the first place it involved the abandonment of the quantitative view of reality[3] according to which one reality was conceived to differ from another only in respect of the negations, absences, and limitations appertaining to the one or the other, differ, that is, not by reason of their quality,[4] but their degree (*Grad*). He now argues[5] that the difference between one reality and another is qualitative.

[1] *Vide supra*, p. 59, "adunata", "constituant", etc. Cp. Ber. II. 85: alle Realität auf eine oder andere Art durch ihn begriffen sei.

[2] Ber. II. 132. Cp. "indeclinabilem catenam", Ber. I. 399.

[3] A view developed in the *Betrachtungen über den Optimismus*, 1759, and no doubt derived from Baumgarten, *Met.*, sects. 246 ff.: Quantitas qualitatis est gradus.

[4] As contrasted with the view recently maintained by McTaggart, Kant urged that negations cannot be reckoned among the qualities of a reality.

[5] I.e. in the *Beweisgrund*, but the whole matter is more fully developed in the *Versuch den Begriff der negativen Grössen.*

In the second place, if every reality has its own positive content, realities cannot all be embraced in a single subject as *Bestimmungen neben einander.*[1] There is among existent realities a real opposition (*Realrepugnanz*) which is totally different from logical opposition (*logischer Widerspruch*). The power of a body to move in a certain direction and an equal tendency toward the opposite direction involve no contradiction. They are actual opposites whose total effect is not logical contradiction but actual rest. Now, realities cannot in their totality exist in God as predicates, for in that case positive *Widerstreit* would arise. They are, therefore, consequents or effects of God, and their algebraical summation yields a result equivalent to zero.[2] It cannot, however, be said that Kant had any clear apprehension of this important distinction[3] between logical opposition and real opposition. Real opposition presupposes more than mere annulling of effects. For example, waves of antagonistic spectral colours such as violet and yellow produce, it is true, a "colourless result", but that product is by no means "the equivalent of zero", but an actual member of the black-white series. Similarly "rest" in Kant's own illustration is not merely a cogitable nothing (*Nichts*), but actually something (*Etwas*). To have completed the distinction between logical opposi-

[1] Ber. II. 85.

[2] "The world as a whole is of itself nothing except in so far as it is something through the will of another. The sum of all existing reality in so far as it is grounded in the world is, therefore, regarded in itself, equal to zero. The fact that all possible reality in relation to the divine will produces a positive result does not annul the being of a world. But from this being the fact necessarily follows that the existence grounded in it is, in and for itself alone, equal to zero. The sum of what exists in the world in relation to that ground which is, apart from it, positive, but, in relation to the inner real-grounds opposite to one another, is, therefore, equal to zero. Now since in the first relation no opposition of the real grounds of the world to the divine will can find place there is accordingly in this respect no annulling, and the sum is positive. But since in the second relation the result is zero it follows that the positive grounds must stand in opposition; regarded as such and added together they produce zero." Ber. II. 197.

[3] It contained the germ of a notion now recognised to be of fundamental importance in mathematics, the notion, namely, of a "difference of sense". Cp. B. Russell, *Principles of Mathematics*, Vol. I, p. 227.

tion and real opposition would have meant going to the root of the distinction between ground and consequent on the one hand, and cause and effect on the other. In a "general note" to the essay on *Negative Quantities*, Kant seems to be in full view of the question of the nature of real relations. "How something follows from something else other than in accordance with the principle of identity is a point which I should very much like to have explained to me. . . . Thus the real ground of the existing world is contained in the will of God. You may analyse that will, but you will never find there an existing world contained as it were in it and affirmed therefrom by the law of identity. . . . Nor will it do to use terms like cause and effect, for they already contain the idea of ground and consequent." It is curious that, notwithstanding his great admiration of Crusius, and despite the fact that he actually quotes Crusius at this point,[1] Kant still fails to accept the lead offered by that acute critic of the Wolffian rationalism. Crusius,[2] in maintaining that the principle of determination cannot be derived from the principle of contradiction, presses the consideration that if you begin by calling A an effect you cannot deny that it has a cause, but he goes on "what I desire to know is whether A *is* an effect". Kant was not yet aware of the problem presented by real-grounds[3]; and he concludes: "I have been pondering over the nature of our knowledge in respect of our judgments of grounds and consequents, and I shall some day publish the detailed result of these investigations. It will then be seen that the reference of a real-ground to something which through means of it is either affirmed or annulled, cannot be expressed by means of a judgment, but only by means of a concept. One can by analysis easily reduce this concept

[1] To reject his identification of ideal ground and logical ground.

[2] *De usu*, sect. 14.

[3] Weymann, in the *Bedenklichkeiten*, accuses Kant of plagiarising from Crusius here, but in reality Kant had scarcely grasped the true significance of the empiricism of Crusius.

to simpler concepts of real-grounds, yet in such a way that finally all our knowledge of this reference resolves itself into simple and unanalysable concepts of real-grounds whose relation to consequents cannot be further explained."[1] It is further apparent from the *Träume eines Geistersehers* (1776) that, holding as he did to the logic of rationalism, he could only regard the unanalysable concepts of real-grounds, and the *Zusammenhang* therein involved, as being wholly outside the scope of our laws of thought, and as on that account fundamentally unintelligible. "In the relations of cause and effect, of substance and activity, philosophy serves at first to analyse the complicated appearances, and so to reduce them to simpler presentations (*Vorstellungen*). But when one comes finally to fundamental relations (*Grundverhältnisse*), the business of philosophy comes to an end. As to how something can be a cause or possess a force it is impossible for reason ever to determine, but these relations must be taken solely from experience. The laws of our reason serve only for comparing in accordance with identity and contradiction. But so far as anything is a cause, something will be affirmed through something else, and there is therefore no connection possible by virtue of agreement. In the same way, too, if I wish to regard the same thing not as a cause, no contradiction ensues, for it is not contradictory that if something is affirmed, something else is annulled. Consequently the fundamental concepts of things as causes, the concepts, namely, of forces and activities, if they are not derived from experience, are wholly arbitrary, and can neither be proved nor disproved."[2]

[1] Kant closes with a challenge to those whose self-assumed wisdom is illimitable, to try to penetrate to the core of such problems—a remark which has been considered reprehensible (cp. Ward, *Study of Kant*, p. 19). But he might fairly have pleaded provocation, for as Thiele (*Die Philosophie Im Kants*, Erster B., zweite Abth., S. 193) has shown, Kant here had in mind Weymann's stinging criticisms of the *Beweisgrund*. Of Kant's *aufgelösete Atomen*, as Weymann described them, namely the ultimate concepts arrived at by analysis, Weymann says that they have no wedding garment, and can claim no citizenship in the masculine society of profound philosophers. Hence Kant's satirical reference to the "profound philosophers". Ber. II. 201.

[2] Ber. II. 370.

The general result of the *Träume* was to show that whilst all our judgments must be founded on concepts derived from sensuous experience, yet experience does not help us to penetrate to the *why* of a thing or event. If, on the one hand, we follow the *a posteriori* method, "we soon arrive at a 'why' which cannot be answered, and this is about as creditable to a philosopher as to a merchant who in regard to the payment of a bill politely asks the creditor to call again". On the other hand, the difficulty lying across the *a priori* path is that "of starting I know not where, and coming I know not whither". Moreover, the *a priori* method, which claims to follow "the straight line of logic", is helped out only by "giving the lines of evidence an imperceptible twist, and so, by stealthily squinting in the direction of certain experiences or testimonies", the philosopher "brings reason to the point of proving just what he all the time had in mind as the experience to be proved rationally".

Metaphysical knowledge seems, therefore, to be impossible, for its transcendent character makes it unattainable along the *a posteriori* road, while along the *a priori* road it is suspect. "The case for metaphysics", says a *Reflexion*[1] of this period, "cannot be sustained." Yet Kant was in love with metaphysics, and rather than desert her he will emancipate her from rationalism. Her new designation shall be "the science of the boundaries of human reason". Thus will be destroyed "that vain belief and empty knowledge which inflates reason and usurps the place which might be occupied by the teachings of wisdom and useful instruction".[2] Ceaseless

[1] No. 153.

[2] *Träume*. Cp. Reflexion No. 167 (Erdmann, II. S. 50): Metaphysik ist nicht Wissenschaft, nicht Gelehrsamkeit, sondern bloss der sich selbst kennende Verstand, mithin ist es bloss eine Berichtigung des gesunden Verstandes und Vernunft nach einem Princip. Die Gelehrsamkeit und Belesenheit ist ein Mittel, ihre Lehre durch Beispiele praktisch zu machen. Sie (dient) andern Wissenschaften zur Grenzscheidung und hält den Menschen an seine Bestimmung, was den Gebrauch und die Schranken seiner Vernunft betrifft; es ist die logische Selbsterkenntniss. Sie ist befremdend bitter, weil sie den eitelen Stolz niederschlägt und eingebildetes Wissen wegnimmt. Sie macht unsern Besitz sicherer, aber zum Eintrag des eingebildeten, und hindert die Bücher

investigation into the meaning and credentials of metaphysics, however, made it impossible that Kant should long abide by the definition of metaphysics as mere knowledge of the limits of knowledge; and his central quest from the middle of the 'sixties onward was after a new and genuine metaphysics.[1] *Das Jahr '69 gab mir grosses Licht*,[2] and in

anzuschwellen. Den grössten Gewinn macht von ihr die Religion; sie wird durch dieselbe in allem, was die Religion Moralisches ist, gesichert, gegen Schwärmerei und Unglauben gedeckt, von der Abhängigkeit in Ansehung der Schulsuttilität befreit. Sie macht, dass unsere Handlungen aus den Quellen des gesunden Verstandes können abfliessen ohne die ungewisse und jederzeit wandelbare Schulgrüblerei befragen zu dürfen.

[1] Kant's condition of mind in the later 'sixties is revealed in several important letters. One addressed to Lambert (31/12/1765) shows that he was concerned chiefly with the method of metaphysics. Current philosophy appeared to him to be in a state of dissolution. He thought he had arrived at a "sure method" of metaphysics, but he desisted from publishing because while there was an abundance of examples of perverted metaphysics, it was far from easy to find material for a really constructive effort. He accordingly decided to begin with a few smaller works, the first of which were to be "die metaphysische Anfangsgründe der naturlichen Weltweisheit und die metaphysische Anfangsgründe der praktischen Weltweisheit. (Ber. X. 56.) To Herder (9/5/1767) he writes: "Since we parted, I have changed a number of my views, and as I am chiefly concerned with recognising the actual determination and limitations of human capacities and inclinations I believe I have been fairly successful in regard to morals. I am working out the metaphysics of morals, and I think I can supply the self-evident and fruitful principles and the method by which the very common but frequently barren efforts in this kind of knowledge should be directed if they are to be of any service." (Ber. X. 73.) Cp. Letter from Hamann to Herder, 16/2/1767.

[2] It is not easy to decide how this came about. Erdmann (*Reflexionen Kants*) points to the antinomies which were very much to the fore in Kant's mind at the time, and Kant's own letter to Garve (Ber. XII. 256), though written twenty-five years subsequently, lends support to this view. Paulsen (*Versuch einer Entwicklungsgeschichte der Kantischen Erkenntnisstheorie*) thinks it was due to Hume's treatment of causality, and it seems fairly clear that while Kant was already familiar with Hume's ethical doctrines before this time (see *Beobachtungen über das Gefühl, u.s.w.*, 1764, *Nachricht von der Einrichtung seiner Vorlesungen u.s.w.*, 1765, *Träume*, 1766), it was about the year 1769 that he was definitely influenced by Hume's theoretical philosophy. (Cp. Erdmann, *Kant's Proleg.*, p. 81, Arnoldt, *Kant's Jugend, u.s.w.*, p. 68, Vaihinger, *Kom.*, I. 340 ff.) Windelband (*Über die verschiedenen Phasen der Kantischen Lehre vom Ding an sich, Vierteljahrschr. f. Wiss. Phil.*, 1876) and Vaihinger (*Kommentar*) trace his change of view to the perusal of the *Nouveaux Essais* of Leibniz, which appeared in 1765. Kant himself tells Herder (Letter 9/5/1767) that his habit was to "turn everything upside down" with utter indifference to his own arguments or those of others, and to regard it from all possible points of view. Doubtless it was along many converging lines that he was driven to the position maintained in the Dissertation.

1770 appeared the *Dissertation*, with its unexpected rehabilitation of a positive view of metaphysics. In the *Träume* he appeared to have abandoned all *a priori* knowledge, not only of the transcendent kind (e.g. God and immortality), but of the world of experience. But in 1770 he was in possession of a positive conception of *a priori* knowledge.

The logical starting-point of the argument presented in the *Dissertation* is the essentially rationalistic view of the world of sense-experience as successive states or determinations of an essence (or form) which is itself fixed and unchangeable. All change presupposes the identity of the subject as the ground of its variable determinations. This conception of absolute totality Kant regards as "the crucial test of the philosopher".[1] It has been argued that since regress *in quanto continuo* from the whole to the presented (*dabiles*) parts, and progress *in infinito* from the parts to the given whole (*totum datum*), must for ever lack a terminus, the whole cannot in accordance with the laws of intuitive cognition be completely thought as a *compositio*, nor the *compositum* as a *totalitas*. But, it is argued, a conception like that of the infinite is not to be rejected as impossible simply on the ground that it is *irrepræsentible*, for the fact that it is impossible to "follow out in the concrete, and to transfer to the intuitive faculties those abstract ideas which the mind has received from the understanding"[2] is no reason for rejecting the abstract notion of the intellect as impossible. The impossible is that which is repugnant to the laws of intellect and reason. Thus the mathematical concept of infinity is not to be rejected simply because of the impossibility of arriving at an infinite number by the successive addition within time of unit to unit, "for there may exist an intellect (though not a human intellect) which perceives a multiplicity distinctly by a single intuition without the successive application of measurement".

[1] § 2, Ber. II. 391. [2] § 1.

For Leibniz, the process of sense-perception was a process of intuiting vaguely those eternal truths which are in their real nature disclosed only to thought. Thus, since the concept of substance implies that which exists in and for itself in isolation from all else, the factual community of substances is secured only by the further principle of pre-established harmony. Unquestionably the most considerable step taken in the *Dissertation* is the adoption (under the influence of Lambert) of the distinction between form and content, a distinction which enabled Kant to dispense with the absolute legislature of pure concepts in the realm of cognition, and locate them on the side of its form. Thus the perception of material objects is rendered possible through an *a priori Grundbegriff* of absolute space which itself cannot be an object of sense-perception,[1] but a way in which our sensations are co-ordinated—a form of sensibility. And the same is true of time. It is in respect of the element of form that knowledge *a priori* is declared to be possible. "In order that the various impressions (*varia*) of the object affecting the senses may coalesce into some whole of presentation, there is required an inner principle of the mind through which, in accordance with stable and innate laws, the *varia* may take on some form."[2] The form of the sensible world, the *nexus universalis* of all things regarded as phenomena, is the twofold *subjective* condition of space and time, concepts not abstracted from external sensations, but supplying the fundamental form without which sensuous cognition is impossible. Further, sensuous knowledge, since it consists of modifications or states of the cognising subject, and since it "depends upon the peculiar nature of the

[1] This is explicitly recognised in the essay *Von dem ersten Grunde des schiedes der Gegenden im Raume*, 1768 (Ber. II. 383), where, under the influence of Euler (*Réflexions sur l'espace et le temps*, 1748), Kant argues from what is now called asymmetry in spatial relations that space cannot be merely relational. Cp. a *Reflexion* (Erd. II. 403) belonging to this period: Raum (kann) nicht bloss aus der wirklichen Rührung der Sinne entspringen, sondern (muss) vor ihr vorhergehen.

[2] § 4.

subject in so far as he is capable of being modified by the presence of the object", is the representation of things as they appear. Whatever knowledge is exempt from such subjective condition, and has reference directly to the object, is intellectual or rational knowledge, and is the representation of things as they are. In its real use (as contrasted with its logical function in operating upon the material supplied to it by sensibility, in accordance with the principle of contradiction) the intellect may pass beyond the knowledge of things as they appear to knowledge that is independent of sensuous experience. To the intellect thus conceived there are given (*dantur*) concepts or *ideæ puræ*,[1] both of things and of relations (*conceptus ipsi vel rerum vel respectuum*),[2] concepts of "possibility, existence, necessity, substance, cause, etc., with their opposites or correlatives".[3] These concepts are not abstracted from sensuous elements (experience merely serving as the occasion of their appearance), but are considered in abstraction from those elements. They are "abstracted from laws inherent in the mind by attending to its acts on occasion of experience". According to the dogmatic purpose of intellectual concepts (as contrasted with the elenctic, whose function was to clear away error rather than advance knowledge), these concepts issue in "a certain pattern which serves as the common measure of all other things in so far as they are realities".[4] This pattern or *Perfectio Noumenon* is the principle of the form of the intelligible world, the principle of the *mutuum commercium*, and of the totality of all that exists, for from the mere existence of separate substances their mutual relations could not be understood, seeing that a thing could not be necessary and yet dependent. The world of substances is not a summation of parts, but a whole of contingent things whose conjunction is the consequence of their common dependence upon one supreme cause.

[1] § 3, and cp. *Reflexionen* 73 and 74.
[2] § 5. [3] § 8. [4] § 9.

Metaphysics, as here conceived,[1] yields, then, a hierarchy of concepts which terminate in the idea of an *ens summum*, God,[2] and Kant thought that if it were possible to pry into the causes of sensuous intuition, it might be found that the mind does not perceive external things except through the presence of one common sustaining cause, and consequently space, which is the universal and necessary condition of the compresence of all things sensuously cognised, might be called the phenomenal omnipresence of the common cause; and time, as something infinite and immutable in which things exist and endure, might likewise be considered the phenomenal eternity of the general cause.[3] But since human intuition is possible "only in so far as anything affects our senses", and since the *noumenon* cannot be intuited by us, Kant suggests that rather than follow Malebranche in contending that *nos omnia intueri in Deo*,[4] it were wiser to "hug the shores of such cognitions as the mediocrity of our intellect permits us", and to be content with the *cognitio symbolica* which we thereby obtain.

Kant's avowed intention to establish a genuine Metaphysics exhibits itself at this time in a mood of extraordinary restlessness. Only a fortnight after the *Dissertation* was defended, he wrote to Lambert[5] that he was anxious to correct the "faults of hastiness" therein. In particular he was dissatisfied with the positive results, yet the proposed additional matter relates chiefly to the share of the understanding in knowledge. Metaphysics is to be protected from the errors which threaten it *from the false claims of sensibility*! In a letter to Marcus Herz[6] this aim is still paramount.

[1] Philosophia prima continens principia usus intellectus puri est metaphysica (§ 8). Philosophia pura qualis est metaphysica (§ 23). Cp. *Reflexionen* 94 and 95.

[2] Or in its practical aspect, *perfectio moralis*. [3] § 22, Scholion.

[4] *Ibid.* Paulsen's view (*Versuch einer Entwicklungsgeschichte der Kantischen Erkenntnisstheorie*, S. 108–12), that the theology of the *Dissertation* is pantheistic, scarcely does justice to the way in which Kant here shrinks from the conclusions toward which his argument was tending. Kant closely adheres to his earlier view of the relation of God and the world. Cp. *Reflexionen* 1616 and 1604.

[5] 2/9/1770. Ber. X. 96. [6] 7/6/1771. Ber. X. 121.

Reference is made to a work on "The limits of sensibility and reason", which was to determine the relationships of the fundamental concepts, and to show what knowledge can be derived from pure intellectual concepts in the realms of æsthetics, metaphysics, and morality. In a subsequent letter to Herz[1] the plan of the whole work stood thus:

1. Theoretical part
   (1) Phenomenology.
   (2) Nature and system of metaphysics.
2. Practical part
   (1) General principles of feeling, taste, and sensuous desire.
   (2) First grounds of morality.

But, as is well known, in pondering over the theoretical part of this undertaking he had noticed that something essential was lacking, namely a treatment of the question "on what rests the reference to the object of that which we call idea (*Vorstellung*) in us?" In the *Dissertation* he had been content with the dogmatic assertion: patet, sensitive cogitata esse rerum repræsentationes *uti apparent*, intellectualia autem, *sicuti sunt*.[2] In both cases we are dealing, he had urged, with *præsentationes*, something given. The general problem which stared him in the face in February 1772 was that of the validity of the objective reference in any *Vorstellung*, whether sense-presentation or intellectual concept. Yet because his dominant interest was the problem of the possibility of a genuine metaphysics, he passed over the problem involved in the use of the verb *afficirt* as furnishing the guarantee of an object of sensuous perception. Accordingly he thinks he sees in the first place that if a *Vorstellung* can be taken simply as the mode in which the subject is affected by an object, the reference of *sinnliche Vorstellungen* to their causes, i.e. to sensuous objects, is justifiable. In the second place, if the object were produced by the *Vorstellung*, the reference might be comprehensible. But (moral ends apart) our understanding is not the cause of

[1] 21/2/1772. Ber. X. 129. [2] § 4.

the object through its *Vorstellungen*, nor is the object the cause of the *Vorstellungen* of the understanding *in sensu reali*. In the case of these *begriffliche Vorstellungen* Kant had been content with the mere negative assertion that they were "not modifications of the soul produced by the object". How then can they refer to an object? The critical problem was now before him, "how my understanding, by a purely *a priori* process, can form for itself concepts of things, concepts to which actual things must conform; how lay down real principles as to their possibility, principles to which experience must exactly conform?"[1] The traditional devices, Malebranche's intuition, Crusius's rules and concepts implanted by God, are dismissed as involving supernatural influx and intellectual pre-established harmony respectively. Apparently, Kant had a possible solution in mind, for he anticipated being able to lay before the public *eine Critick der reinen Vernunft*,[2] dealing with "the nature of theoretical as well as practical knowledge so far as it is merely intellectual". The first part[3] of the work, dealing with the sources of metaphysics, its method and limits, he contemplated publishing within three months. That the positive aspect was uppermost in his mind is clearly to be seen in another letter to Herz,[4] in which he diffidently expresses the hope of being able "to give to philosophy a new turn, and one far more advantageous to religion and morality". There were difficulties in the way, however, and in 1777 he refers to *die Kritik der reinen Vernunft* as "lying like a stone on the path".[5]

[1] Ber. X. 131. The point is put more fully in *Reflexion* 925.
[2] The first appearance of this famous title.
[3] The latter part was to deal with the pure principles of morality.
[4] Ber. X. 143. The letter is undated, but almost certainly belongs to the year 1773.
[5] Ber. X. 211. Letter to Herz dated 20/8/1777.

B. THE TRANSCENDENTAL LOGIC AND ITS METAPHYSICAL IMPLICATIONS

CHAPTER IV

THE CRITICAL DOCTRINE OF JUDGMENT

To the consideration of the problem how, in regard both to sense-experience and to rational cognition, mere subjective contents could have reference to objective reality, Kant brought the whole apparatus of traditional logic, supplemented, though not displaced, by the new transcendental logic. He continued to regard judgment as an act of relating in thought a certain predicate to a certain subject, and he now distinguishes between analytical judgments (affirmative) in which the connection of the predicate with the subject is thought as that of identity, and synthetic judgments in which there is added to the concept of the subject a predicate which could have been obtained from it by no process of analysis. The proposition "all bodies are extended" evinces itself as *a priori* certain because the predicate is one of the components of the subject, and is extracted therefrom in accordance with the principle of contradiction. On the other hand, in the proposition "all bodies are heavy" the predicate is synthetically added to the subject on the basis of experience, and consequently the judgment, being empirical, is also contingent. It was part of Kant's achievement, however, to call attention to certain *a priori* synthetic judgments, propositions in which the predicate lies wholly outside the concept of the subject, but which nevertheless are universally valid. Such judgments constitute the very fabric of human knowledge, and accordingly the essential problem of pure reason is presented in the question: How are synthetic judgments *a priori* possible? In other words, how can a predicate be ascribed necessarily to a subject which does not already contain it?

This formulation of the critical problem presents, however, a narrower issue than is actually implied in the critical doctrine of judgment, for in the first place Kant's distinction

between analytical and synthetical judgments is largely arbitrary; in the second place he continued to affirm that the so-called analytical judgments are based entirely on the principle of contradiction[1]; and in the third place he failed to see the full significance of the problem presented by synthetic judgments *a posteriori*. In short, the real problem confronting him at this juncture of his thought was the problem that also confronted him at the outset of his metaphysical inquiries, the problem, namely, of the nature of the tie connecting subject and predicate. Starting from the position that all true judgments are analytical, he comes[2] to draw a distinction between judgments based upon pure identity and judgments based upon direct experience. From first to last he was content to say that judgments of the former type are based on the law of contradiction alone. We may leave on one side the identical propositions[3] of the form A is A, since he recognises that in such judgments as that "all bodies are bodily", *idem* is defined *per idem*, and nothing at all is explained.[4] The so-called proposition "A is A" is in truth not strictly a proposition at all, but a mere tautology. The type of judgment which he calls analytical is that which is concerned with the relation of essences and species, the connection of the predicate with the subject being thought through identity. The proposition that "all bodies are extended" is declared to be an *a priori* analytic judgment on the ground that the predicate, being already comprised in the concept of the subject (i.e. the concept "extended" is identical with some part of the concept "body"), cannot without contradiction be denied of that subject. This contention holds good, however, only so long as the subject in a proposition is held to be defined by a number of predicates, one or more of which is separated out for predication. Certain predicates are held to form part

[1] *Prolegomena*, § 2.

[2] *Vide supra*, pp. 65-6.

[3] Kant sometimes allowed himself to speak of analytical judgments as identical judgments. E.g. A 594 = B 622.

[4] See *Fortschritte d. Met.*, Hart. VIII, 582; and cp. *Logik*, § 37.

of the essence of the subject, so that any person who thinks the concept of the subject must necessarily think the concept of the predicate as contained within it. The concept "extended" is held to be contained within the concept "body", whilst the concept "heavy" is "not really thought in the concept of body", but can be connected with that concept solely on the basis of experience. Only if the concept "extended" be already contained in the concept "body" will it, then, be contradictory to deny the former of the latter.

What, now, determines which predicates are contained in the concept of a subject? Kant maintains that although the concepts which supply the matter of analytical judgments may be empirical, it would be absurd to think of grounding an analytical judgment on experience, for in forming such a judgment I need not go out of the sphere of my conceptions. When, however, I recognise by observation that all[1] bodies are heavy, I synthetically add to my conception of body a predicate which was not previously thought in the general concept of body. It would appear, then, that the general concept of body consists of a selected group of predicates derived in the first place from experience, and more or less arbitrarily[2] taken to represent the definition[3] of the subject. Assuming, however, that certain predicates by common consent form part of the essential content of the notion of a subject, it surely cannot be affirmed that in regard to any of those predicates the judgment "S is P" is purely analytical. Analyse S into $(S)p^1p^2p^3p^4 \ldots p^n$, and the relation between S and its components is analytical, but the multiplicity is a related multiplicity, and since the multiplicity does not contain the ground of its own unity, the relation between the components and the whole is a synthetic relationship. In the proposition

[1] "Some" in the *Prolegomena*.

[2] See A 721.

[3] *Ibid.* In the case of empirical concepts Kant prefers to speak of their exposition rather than of their definition, the latter term representing the *complete* notion of a thing.

"all bodies are extended", what is asserted is that within the subject "bodies" the property "extendedness" is connected with some other properties of bodies. The subject-notion is thus exhibited as a synthesis of properties. Consequently, analytic judgments are possible only in and through synthetic judgments. Every judgment is in truth both analytic and synthetic. As Mr. Bradley somewhat paradoxically puts it, "analysis is the synthesis of the whole which it divides, and synthesis is the analysis of the whole which it constructs".[1]

Turning to the judgments called by Kant synthetical, judgments in which the predicate falls outside the concept of the subject, we are confronted by a mark of difference. In the case of empirical judgments, the possibility of the synthesis of the predicate with the subject rests upon experience itself. "I recognise by observation that bodies are heavy." The two concepts "weight" and "body" belong to one another (only contingently, however,) as parts of a whole, namely of experience which is itself a synthesis of intuitions.[2] In the case of synthetic judgments *a priori*, on the other hand, I no longer have the advantage of looking about in the realm of experience for what I want. Thus in the proposition "everything that happens has a cause", experience does not furnish the ground of the synthesis of the predicate with the subject. The problem is, therefore, what is the unknown X on which the understanding rests when it affirms that it has found outside the concept A a foreign predicate B which it considers to be connected with it? Accordingly, Kant conceives his central problem to be: How are synthetic *a priori* judgments possible?

The distinction just referred to is, however, inconsistent with the critical position and unsound in itself. It is inconsistent with the critical position, inasmuch as it is of the essence of that position to recognise that the connectedness involved in knowledge can in no way be explained as due

[1] *Logic*, II. 471. [2] B 12.

to the manifold given in sense-perception. The elements of the manifold, it is here as in the *Dissertation* assumed, are in themselves discrete. The distinction is, moreover inherently untenable because it is based on an unwarrantably narrow connotation of the term "synthetic". By "synthetic" judgment Kant is here thinking not of all judgments in which there is involved an act of synthesis, but merely of judgments whose predicates fall outside the notion of the subject.[1] He ignores those judgments whose subject terms do not denote a general content, but rather concrete particular things. He seems to be ignoring[2] those judgments in which insight into the identity between subject and predicate is obtained by direct experience, and to be unmindful also of his contention that "in order to arrive at a definition we must represent to ourselves as an attribute of a thing that which in the first instance we immediately cognise in the thing". Thus in regard to synthetic judgments *a posteriori*, while he points to experience as the basis of the possibility of the synthesis of predicate with subject, he has no clear recognition that the synthesis involved in synthetic judgments *a posteriori* is dependent on judgments whose subjects designate *particular* entities. Yet the synthesis involved in such judgments is of the same kind as that which is involved in synthetic judgments *a priori*, and requires the same treatment.

That there are valid synthetic judgments is evident, so Kant thought, from a scrutiny of certain judgments of mathematics and of natural science. In the proposition $7 + 5 = 12$, the predicate "equal to twelve" is not contained in the subject $7 + 5$ taken by itself, and could not be obtained by analysis of it. Similarly, in the proposition

[1] The whole inquiry is vitiated by his failure to do justice to any type of judgment other than that which affirms the inclusion of a particular within a general class. *Urteilskraft* is defined as the faculty of subsuming a particular case under a rule or principle whereby that notion is known or determined (*Analytic of Principles*).

[2] *Vide supra*, pp. 65–6.

"a straight line between two points is the shortest", the concept "shortest" cannot by analysis be extracted from the concept "straight line". That the judgments are valid no one disputes. Kant attributes their *a priori* character to the fact that the concepts of mathematics are *a priori* constructions rendered possible by means of the *a priori* manifold of space and time. Always on the ground of intuition[1] the mathematician arrives at clear and universally valid solutions of his problems. Thus, it is maintained, arithmetical proof is possible because the calculator has full control of the units which make up any integer, and the proof of a geometrical proposition owes its certainty to our being able to draw the figure.

It needs but little consideration to become convinced of the untenability of this argument. In the first place, the work of modern mathematicians[2] has amply demonstrated that the solution of mathematical problems does not depend upon any appeal whatsoever to intuition. The researches of Dedekind, Cantor, and others show that integers may be defined without reference to quantity at all. "It follows that for algebra and analysis it is unnecessary to assume any material beyond the integers, which can themselves be defined in logical terms. It is this science, far more than non-Euclidean geometry, that is really fatal to the Kantian theory of *a priori* intuitions as the basis of mathematics."[3] Moreover, on Kant's own showing it is impossible that intuition could ever account for the possibility of a synthesis of mathematical concepts regarded as constructed concepts, for such concepts are already involved in intuition. If the concept of any integer is the product of abstraction, it has been generated out of the apprehension of several groups

[1] Cp. *Über die Deutlichkeit, u.s.w.*, Ber. II. 278, 291, and *Dissertation*, sects. 12 and 15c.

[2] E.g. Frege, *Grundgesetze der Arithmetik*, 1893; Couturat, *De l'infini mathématique*, 1896, who points out that Kant could hold his theory only because he restricted his examples to singular propositions. Cf. also Russell: *The Foundations of Geometry*, 1897, and *Mathematical Philosophy*, 1919.

[3] Russell, *Principles of Mathematics*, p. 145.

already recognised as instances of such an integer. The concept is already implied in the content from which it is presumed to have been abstracted. All intuitional process is conceptually controlled.

What Kant failed to realise was that the type of judgment under consideration is one in which the predicate neither is included in the notion of the subject nor lies entirely outside the latter, but one in which two notions presented in relative separation are brought into a synthesis. The judgment $7 + 5 = 12$ is a relational judgment; it asserts a relation of equality between two notions regarded as separate from each other. The ground of the synthesis contained therein is the relational idea. Again, the proposition "a straight line is the shortest possible distance between two points" is a relational judgment. It is not a case of unfolding a predicate already contained in the subject, but of the analysis of a total situation in which the predicate and the subject are affirmed to be in a certain relation. Now, such a relational idea, or the unity which underlies the total judgment, is exactly that which Kant is in search of throughout the critical inquiry.[1] The question at issue is, therefore, none other than the quite general question, How is knowledge possible? This wider problem was, indeed, indicated by Kant's term "transcendental", which he meant to indicate an investigation into the conditions implied in knowing as such. But he was led to frame a "transcendental" logic in a manner analogous with the formal logic of concepts, to which he was still subservient, with the result that while contending that knowledge consists essentially in

[1] As instances of synthetic *a priori* judgments of natural science (*physica*), Kant, in the second edition (B 17), somewhat carelessly cites the propositions: "In all changes of the material world the quantity of matter remains unchanged" and "In all communication of motion, action and reaction must always be equal". But these clearly are not instances of the type of judgment he had in mind, for they contain concepts which, being empirical, have no place in a pure or universal science of nature. Of the type required are those given in the *Prolegomena* (§ 15), "Substance is permanent", and "Every event has a cause"; and these again are the type with which the *Analytic* is concerned.

judgment, he is repeatedly in danger of reducing the judgment to the concept and of falling back upon a doctrine of "pure concepts".

Distinguishing within formal logic between special and general logic, he finds that general logic when pure (in contradistinction to applied) is concerned with the necessary laws of thought in abstraction from all content, that is from all relations between cognition (*Erkenntniss*) and its object. General logic is concerned with the logical form in the relations of cognitions to one another, and in so far as it exhibits the universal and necessary laws of the understanding, it must, in these very laws, present us with *criteria* of truth.[1] The accordance of a cognition with the universal and necessary laws of the understanding and reason is the *conditio sine qua non* or negative condition of truth. In general logic we have, therefore, a body of demonstrative doctrine in which everything is completely determined *a priori*.[2]

The limits of "general logic" are obvious. Here the understanding deals only with itself; its function is the mere comparison of concepts regardless of their origin. Kant thinks that if it can be shown (and it was his purpose to show) that there are certain pure *a priori* concepts which are valid of objects, there must be another *a priori* logic which is concerned with the possibility and conditions of valid *a priori* knowledge of objects. This "transcendental" logic abstracts not from all differences in the object, but only from empirical content, for since it is concerned with the synthesis involved in knowledge it must take account of the source of the concepts which render knowledge possible.

But when the new epistemological inquiry was regarded as a species of logic co-ordinate with general logic, the way was prepared for serious confusion. The difference between the two logics expressed itself in a difference between the analytical or discursive, and the synthetical or creative use of the understanding. The judgment in both cases is a

[1] *Logik, Einleitung*, VII. Ber. IX. 51. [2] A 54 = B 78.

function of unity,[1] a process by means of which we introduce connection and coherence into a multiplicity of cognitions, but whereas in general logic the concepts are abstracted, through discrimination and comparison, from the content of experience, in "transcendental" logic, so it was contended, they originate from the understanding itself. It is an essential position of the critical theory that the categories, although misleadingly called *Begriffe*, are in no sense comparable with the concepts formed by comparison of and abstraction from objects of experience assumed to be already given. The categories are not products of thought, nor does their function in knowledge, although a "function of unity", in the least resemble that of the concepts of general logic. Far from being obtained from experience, as discursive notions are, the categories are involved in all experience. From the more strictly critical standpoint, it is, indeed, maintained that the so-called analytical (or discursive) thinking of general logic is rendered possible only on the basis of the ultimate and original synthesis involved in *all* knowing. The categories, that is to say, lie at the basis of analytical no less than of synthetical judgments. The search among the types of judgment exhibited in the analytical procedure of the understanding for a clue to the primary functions of the understanding in all knowledge finds its justification only in the fact that in every so-called analytical judgment a process of synthesis is involved. We not only abstract the predicate from the given notion, but we reunite it with the given notion as predicate.

It would seem, then, that the true character of the critical investigation is only obscured by the name "transcendental" logic, suggesting something co-ordinate with general logic. The Kantian epistemology is, in fact, ultimately subversive of the traditional logic, for it makes clear what was not, however, very clear to Kant himself, that all judgments, including so-called analytical judgments, alike stand in need of "transcendental" justification.

[1] A 69 = B 94 *et passim*.

CHAPTER V

THE FUNDAMENTAL CONDITIONS OF KNOWLEDGE

THE epistemological problem, so I have tried to show, presented itself to Kant when he recognised that concepts regarded as thought-contents produced by abstraction have no necessary objective reference. Yet it would be intolerable to suppose that thinking, however purged by the law of contradiction, is an arbitrary process of combining subjective contents. In an act of thinking there is always implied a reference to a real objective connection among the contents which for its purpose have been selected from a mass of experience. Such reference is, from the point of view of general logic, incomprehensible.

Nor was the view expressed in the *Dissertation* any longer regarded as furnishing a satisfactory explanation, for in regard to sense-perception Kant came to the conclusion that what Hume had urged specially in respect of causality applied to all matters of fact, namely that sense-data in themselves are unrelated, and consequently their connections are not given or directly apprehended. Again, in regard to pure or rational cognition it was impossible, except by having recourse to some such principle as pre-established harmony, to understand how *ideæ puræ*, which are abstracted from laws inherent in the mind, could yield any information about objective reality. The Cartesians, Leibniz, and Wolff had freely applied such concepts as ground and consequent, cause and effect, identity and difference, to the determination of the nature and relations of things without consideration of the question whether things and events are rightly conceived by means of such notions.

Since, then, valid synthetic judgments can be based neither upon experience alone nor upon the principles of formal logic alone, the *desideratum* was an investigation into

the conditions of knowledge itself with a view to the discovery of a "supreme principle of synthetic judgments", that is, a law which should be as valid of synthetical judgments as the laws of formal logic are of merely analytical judgments. The question, How are synthetic *a priori* judgments possible? is answered by the deduction of the categories.

The starting-point of the discussion is the fact, taken by Kant to be indisputable, that we are conscious of a changing manifold or succession of presentations. The first step in the argument is that this primitive fact of consciousness of discrete elements presupposes a synthesis, that is, a unification of diverse elements. To be conscious of change is to be conscious of the varied elements *as united* in a single object, and this again implies that they are united by a single act of thought. Now such a unity is clearly not to be sought in any single state of the empirical self, for that is itself in a condition of flux and change.[1] The unity which serves as the ground of diversity and change must itself contain no multiplicity, and cannot be determined as in time. In the subjective deduction the synthesis is described as though it were arrived at by inspecting the psychical process, but such is not Kant's real intention. The synthesis, since it is already involved in consciousness of the manifold, can in nowise be an object of consciousness. It is only by analysis of what is logically involved in consciousness of a manifold as related that the synthesis is discoverable at all. What is implied in the consciousness of a manifold as related is, then, a timeless or purely logical unity of self-consciousness, or self-identity. Any relation between two elements is intelligible only when it is seen to rest upon their combination in and through the unity of apperception. In the objective deduction, which is specially concerned with the objective conditions that render self-consciousness itself possible, the unity of self-consciousness is declared to be in itself a mere form

[1] A 107.

devoid of all content. It is realised only in and through the process of combining a manifold of presentations given to it. The self, or the combining factor in knowledge, becomes aware of itself not immediately, but only as the ground of the synthesis of the manifold. Consciousness of self, the analytic unity of consciousness, or self-identity, can be known only as the presupposition of the consciousness of objects; it is realised only in and through the synthesis by which the manifold is brought to a unity. And this unity of the manifold is just the type of unity that corresponds to Kant's notion of object in general, that is, the universal and necessary feature in the synthesis—that which brings unity into the wandering manifold of intuitions. The self becomes aware of its own unity in referring the manifold of intuitions to an object. The "object" is the correlate of the permanent unity of apperception which is at the same time its ground.

The transcendental unity of apperception is Kant's epistemological substitute for the metaphysical ground of knowledge advanced by the rationalists. The rationalists, he argued, had failed to show how synthetic *a priori* judgments are possible because, taking the law of contradiction to be the sole law of thinking, they had persisted in subsuming under it the law of sufficient reason. But Kant found that while the law of contradiction is the supreme principle of analytical judgments, the law of sufficient reason is the supreme principle of synthetic judgments, and this law, expressed in general terms, is: Every object is subject to (*steht unter*) the necessary conditions of the synthetic unity of the manifold of intuition in a possible experience.[1] The rationalists had, in short, failed to discern the *transcendental* roots of the law of sufficient reason.

The crucial point in the deduction is the transition from the formal unity of self-consciousness to the synthetic processes generative of experience, but it is just in regard to

[1] A 158 = B 197.

this point that Kant's exposition is more than usually tangled and obscure. The subjective deduction was specially concerned with the subjective conditions which render knowledge possible, the synthetic activities, namely, by which the imagination schematises the concepts of the understanding. As such the deduction was psychological in character, and, Kant thought, while of great importance for his chief purpose, formed no essential part of it. For this and other reasons[1] it was not included in the second edition. Yet its omission renders the objective deduction itself incomplete. Here it is shown that the transcendental unity of apperception is a unity which we are compelled to postulate in order that the factual consciousness of succession in time might be rendered possible. Self-consciousness is possible only if the given elements, still regarded as *per se* unconnected, are synthesised in accordance with the conditions prescribed by the unity of apperception. But what are the relational factors which render possible our consciousness of necessary connection? Reasserting his conviction that no necessary connection between discrete sense-elements can be given (whatever connection there may be among things-in-themselves), Kant maintains, without adequate justification, that our consciousness of necessary connection must be due to certain *a priori* forms of unity, and these forms of unity are forthwith declared to be the categories. "In the understanding there exist pure *a priori* forms of knowledge . . . and these are the categories, i.e. pure concepts of the understanding."[2] What is not clear, however, is the way in which the transition is made from the formal unity of self-consciousness to the synthetic processes generative of experience, i.e. from logical form to dynamical function. It would seem to be of the highest importance that the nature of the generative agencies be clearly defined. Kant's language in many places would appear to indicate that he was thinking of the unity of apperception

[1] See N. Kemp Smith, *Commentary*, pp. 236–7. [2] A 119.

not as a mere logical unity, but as a metaphysical entity to whose synthetic functions are due the diverse forms of objective consciousness. This, of course, was his view in 1770, and there is no doubt that it continued to influence his thought. For example, in A 114 it is described as the fundamental faculty (*Radicalvermögen*) of all our knowledge. To resort to a metaphysical entity conceived as exercising these functions would, of course, be tantamount to abandoning the whole critical standpoint. The only self known to us is the self-as-conscious, and the whole argument of the deduction is that the self can be conscious of itself only in so far as it is conscious of objects. On the strictly critical principles, all that can be affirmed of the conditions generative of experience is that certain syntheses in accordance with the categories must be postulated in order to render experience intelligible.

If the subjective deduction calls for rejection, it is, then, not because of its psychological character, but rather because it is not an adequate "transcendental psychology". It is a treatment of the individual consciousness, and not of the functions of the only consciousness with which Kant was here concerned, namely *Bewusstsein überhaupt*. His excessive preoccupation with the "logical" factors in experience prevented his realising that such a transcendental psychology is required to justify the assumption underlying the objective deduction, that the *a priori* forms of thought are likewise synthetic processes. In the deduction of the second edition, as Professor Kemp Smith puts it, "factors which are transcendental in the strict or logical meaning of the term rest upon processes that are transcendental in a psychological sense".[1] In that portion of the subjective deduction which is now generally regarded as of later date, Kant introduces the "productive imagination" to take over the function of supplying the forms with a sensuous content, and applying them dynamically in the generation of experience. It had

[1] *Commentary*, p. 238.

become evident from the objective investigation that consciousness of self is possible only in and through consciousness of objects; consequently the processes generative of consciousness, whether of self or of objects, could themselves no longer be regarded as conscious processes. The generative functions hitherto ascribed to the synthetic processes of apprehension, reproduction, and recognition[1] were now taken over by the productive imagination. Its products (the *schemata*), which are "in one aspect intellectual, and in another sensuous",[2] are the concrete forms in which the intellectual unity of the pure understanding is exhibited in experience. Without such *schemata*, or rules of combination in the general contents of time, there would be no link between the categories or formal conditions and the sensuous intuitions which supply the content.

The difficulties with which Kant is here struggling are due to the circumstance that he is still influenced by the view of the categories as abstract ideas[3] comparable with the generic concepts of traditional logic. In the section on the *Analytic of Principles* he views his exposition as falling into three parts coincident with the three movements of traditional logic dealing *seriatim* with concepts, judgments, and reasoning. He conceives himself to have been concerned in the earlier sections with the understanding as a faculty of concepts, and to have shown what are the concepts which, being the predicates of possible judgments, are constitutive of experience. When, therefore, he comes to the question of the application of these concepts of the understanding to temporal experience, he is obliged to set up the machinery of schematism to mediate between the timeless abstract notions and the manifold in time. Now he defines more

[1] To try to save these, Kant afterwards supplemented them by the addition of a transcendental synthesis corresponding to each stage of the empirical synthesis. But the synthesis still remains a process, and as such it falls within the temporal, i.e. phenomenal realm, and could in no manner be regarded as the fundamental presupposition or condition of the possibility of that experience of which it forms part.

[2] A 138 = B 177.

[3] Cp. *Prolegomena*, § 20.

strictly understanding as the faculty of rules, and goes on to distinguish the faculty of judgment (*Urteilskraft*) as the faculty of subsuming under rules, i.e. of discerning whether a given instance comes under a given rule. Lapsing,[1] however, into the "logic of concepts", he conceives the necessity of a process of subsuming a particular notion under a universal. But it is of the essence of the critical position that the categories are not abstract notions or class-concepts, and that consequently schematism is not a process of subsumption. The categories are wholly different from the concepts met with in "general logic". The latter are concepts produced by abstraction from the content of cognition,[2] while the categories are the conditions which lie at the basis of thinking, and render thought itself possible. "General logic" is concerned with forms of connection between concepts abstracted from experience, while transcendental logic is concerned with the source of their relation in the realm of fact. The pure forms of the understanding are functions of unity; they express the relation which holds between elements in a total situation, and cannot, therefore, be conceived as predicates within a judgment.[3] Moreover, the deduction showed that form and content mutually condition each other, consequently no *tertium quid* is required to bring category and intuition together. If the categories were timeless notions, it would perhaps be necessary (but surely hopeless) to seek *ein Drittes*[4] to mediate between a pure category and sense-intuition. Yet if the categories are functions of unity and actual *Handlungen*, the *schema* is simply the intuition interpreted in terms of the category.

The objective deduction in the second edition[5] contains an analysis of judgment which is more in keeping with the strictly critical point of view. Logicians, it is said, generally define judgment as the representation (*Vorstellung*) of a

[1] On the cause of Kant's confusion here see Riehl, *Der Philosophische Kriticismus*, 2nd ed., I, pp. 532 ff.

[2] A 55 = B 79. [3] *Vide supra*, p. 89. [4] A 138 = B 177. [5] B 140.

relation between two concepts, but they fail to see that the relation asserted in a judgment is quite different from the relation of association. In accordance with the latter I might say that if I carry a body I feel the pressure of its weight. Judgment, on the other hand, is "the mode of bringing cognitions (*Erkenntnisse*) to the objective unity of apperception". It is the assertion of the objective unity of the given presentations. Thus in the judgment "bodies are heavy" I affirm that the two presentations are connected in the object in accordance with the principles of objective determination; that is to say, that they stand in objective relation under the pure unity of apperception. The objective significance which attaches to logical judgments rests in the last resort upon the fact that the transcendental unity in the synthesis which reference to an object makes possible, and the objective unity of self-consciousness to which reference is made, are one and the same. The act of synthesis is an act of judgment; in relating sense-data to the object it expresses the unity of attributes in one subject. The essential truth underlying this view is that every act of awareness is an act of judgment in which there are elements of content and of form. But these are never found in separation. What comes chronologically first in experience cannot fairly be described as discrete data for which thought supplies relational links, but rather a complex situation for the resolution and systematisation of which thought makes use of certain indispensable categories. The judgment does not express the inclusion of a characteristic P within a group S, but affirms a relation between elements in a total situation. Transcendental logic (or epistemology) is, therefore, properly concerned not with the question how pure concepts can relate to the incoherent manifold of sense, but rather with the question of the validity of those acts of judgment or synthetic processes through which objects are apprehended and assertions made.

If the categories be thus conceived as principles of inter-

pretation, the change introduced by the critical philosophy will present itself in different light. To Kant it appeared to follow from his Copernican change that in lieu of a metaphysical ground of the world of experience, transcendental logic had supplied, though its transcendental principles, a positive ground of the phenomenal world. The *a priori* forms had been shown to be the universal and necessary elements in every act of awareness of a manifold in time. And this involved that *knowledge* of nature as an ordered system is rendered possible by the operation, in the process of apprehension, of certain principles which may be shown to be involved in consciousness at the self-conscious level. By reason of what is implied in the supreme condition of all experience, namely that it has meaning only in self-consciousness, there followed certain determinations which hold good for all experience, and in this sense constitute a source of *a priori* knowledge. In Kant's language, we can have no knowledge in the strict sense unless the "I think" be capable of accompanying all our presentations as the common factor in virtue of which alone those presentations form a coherent whole. But what on strictly critical principles is actually involved in the transcendental unity of apperception is not that the understanding is the lawgiver to nature, but that *our knowledge of nature as a rational system* is rendered possible only by the operation, in the process of apprehension, of these indispensable principles. Such, however, was not Kant's position. Experience, he declares, depends upon a synthesis *nach Begriffen* of the object of *Erscheinungen* in general, "a synthesis without which experience would never become *knowledge*, but *eine Rhapsodie von Wahrnehmungen*, never fitting together into any context in accordance with the rules of a thoroughly coherent consciousness".[1] The synthetic principles of the understanding are, he maintains, the necessary conditions of the possibility of experience in any true sense of the term, and "therefore

[1] A 156 = B 195.

of the possibility of the object of experience as such". In short, he passes without hesitation from the assertion that the principles of the understanding furnish the indispensable conditions of systematic *experience*, to the quite different assertion that the understanding is lawgiver to *nature*; and it seemed to follow that existent things are partially composed of the *a priori* factors derived from the unity of apperception.

This contention owes whatever plausibility it possesses to the further assumption, constantly made by Kant at the earlier stages of the critical inquiry, that phenomenal objects are mental entities. Nature, according to this view, can hardly be said to be more than an orderly system of *Vorstellungen*, or in Mill's language "permanent possibilities of sensation". The world of experience, Kant writes, is nothing but "*ein Inbegriff von Erscheinungen, mithin kein Ding an sich, sondern bloss eine Menge von Vorstellungen des Gemüths*".[1] And again, "the objects with which we are concerned are, all of them, in me, i.e. *Bestimmungen meines identischen Selbst*".[2] Such *Modificationen* are not immediately given as *objects*, for as a mere "play of our *Vorstellungen*" they are "as good as nothing". They become objects only when by an act of synthesis they are determined in accordance with the unity of self-consciousness. Kant sees that discrete data of sense cannot be identical, as Hume supposed, with the process of consciousness, yet he still conceived sense-data, when synthesised by the understanding, to be mental contents. Undoubtedly, he intended the synthesis to be conceived as the very act of knowing, but when he describes the object first as *ein Bild*, which has been framed so to speak by the imagination, and then as the ultimate result of the synthesis of the understanding, there can be little question that he is regarding the object as a *product* resulting from the act of synthesis. As thus worked out, the critical treatment only very partially overcame the difficulties inherent in Hume's

[1] A 114. [2] A 129. Cp. also sections VI and VII in the *Dialectic*.

assumption of disconnected "impressions", or "rope of sand", for Kant retained the sand, howbeit he showed it to be cemented into wholes by the connecting and co-ordinating work of the understanding. He did not, however, stay to determine in any precise manner the real character of the rope, nor to explain how the contents of mental states can be regarded as themselves existent objects. Assuredly, his general contention that an object must stand in relation to a subject is impregnable, seeing that subject and object are correlative terms. An object must be an object of possible experience. But that position carries with it no implication that what is experienced consists of mental states. An analysis of experience exhibits by no means simply complexes of mental states which have somehow come to be by the fusion of sense and understanding, and to which the predicate "existence" is applicable. What an analysis of experience does reveal, if we adhere consistently to the critical point of view, is a radical distinction between the process of apprehending and the content apprehended in and through that process. The process of apprehending is no doubt a modification of mind, but that which is apprehended in and through the process, though it is "within experience", is not necessarily mental. With what justification can a mental state be held to be at once both an act of knowing and a content known? Is there any legitimate sense in which a mental modification can be regarded as both a part of the existent whole which we call the mind and a phenomenal object *of* the mind?

Whether or not the categories are constitutive of modifications of mind conceived as ways of knowing is a question which might be answered quite differently from the question as to whether the categories are constitutive of objects. In any act of apprehension certain modes of thinking do seem to be involved. Whether these modes of thinking are innate, as assumed by Leibniz, or whether many of them are the outcomes of a gradual process of evolution after the manner

conceived by Herbert Spencer and G. H. Lewes, it is clear that in our mature thinking certain fundamental modes of thought are operative. In the act (say) of perceiving a table, my recognition of the table as an object characterised by a certain colour implies that I am employing the categories, of quality, substance and attribute, etc. But the categories so regarded, are performing a function very different from that which Kant, in accordance with the view under consideration, conceived them to perform. They are no longer taken to relate, to combine, to synthesise discrete data of sense, but rather to be a means of discerning or distinguishing qualities, etc., which characterise the object presented. The categories, that is to say, *will not be constitutive factors in the object*, but notions employed in the act of apprehension.

The view of *Erscheinungen* as purely subjective tends to be supplanted[1] by the more strictly transcendental doctrine which first comes to light in the later sections of the *Analytic*,[2] and especially in the treatment of the Second Analogy. Here the significant feature for our purpose is the distinction drawn between the *objective* succession of phenomena and the *subjective* succession in our apprehension thereof. Starting as Hume did from the fact that in apprehending we are directly aware of a succession of presentations, Kant asks how we are aware of such succession. He sees that it is impossible to assume with Hume that our successive apprehensions are apprehensions of successive changes in the objective world. We must look for an explanation of the fact that though our modes of apprehending, e.g. a moving boat and a house are in each case successive, we are able to determine that the one is and the other is not objective succession. What is it that enables us to be aware of an *objective succession* as contrasted with a mere *subjective suc-*

[1] It was, however, never entirely relinquished.

[2] See G. Dawes Hicks, *Die Begriffe Phänomenon und Noumenon*, pp. 138 ff., for citation of numerous passages.

cession? His answer is, first, that for what is objectively successive, the subjective sequence offers no guidance; for if the objective order of events be, let us say, x.y.z., the subjective order of their apprehension may be z.y.x. What, then, he asks, can be the meaning of the question as to how the manifold in the *phenomenon itself* may be connected?[1] Phenomena (*Erscheinungen*), in contradistinction to the presentations (*Vorstellungen*) of our apprehension, can only be presented as an object different from it (i.e. our apprehension), if it (the apprehension) is subject to a rule distinguishing it from every other apprehension, and necessitating a certain conjunction of the manifold. That which in the phenomenon contains the condition of this necessary rule of apprehension is *the object*.[2] That is to say (if I may quote Professor Dawes Hicks's comment),[3] "the successive putting together of parts in the construction of a subjective intuition is, in respect of that which concerns the order of the elements of the succession in time, at the caprice of the experiencing subject. Such a sequence is therefore reversible. But so soon as the apprehended content is referred to an objective world, the sequence of the phenomena thus apprehended is not reversible. Each phenomenon is fixed to a determinate place in time, and its position in regard to any other is determined according to an unalterable rule. As members of a sequence the single phenomena determine one another, in respect to position in time, reciprocally, just as, in an analogous way, one point in time determines another." Kant is clear that it is because we are constrained to think of the position of any phenomenon, which we represent to ourselves, as determined in time, that knowledge of objective sequence is possible. "We derive the subjective succession in our apprehension from the objective succession of the phenomena."[4] "There exists in phenomena a succession, and I cannot arrange the apprehension otherwise than in that very succession."

[1] A 191 = B 236. [2] *Ibid.* [3] *Op. cit.* [4] A 193 = B 238.

No injury, it is contended, is done to the general critical theory in thus stating the law of causality. It must not be supposed that "only by a perception and comparison of many events, following in the same manner on preceding phenomena, we are led to the discovery of a rule according to which certain events follow on certain phenomena, and that thus only we are entitled to form for ourselves the concept of a cause". We do not, that is, form our concept empirically; we discover it in experience only because it lies at the foundation of experience. The discovery is the discovery of a category which in the act of synthesis the understanding has itself introduced into experience. The category of causality is a veritable constituent of experience, for it precedes all experience of objectivity. The Understanding supplies the category of causality to phenomena, for objective sequence is possible only for a mind which connects the phenomena presented to it according to the law of causality. When the succession is said to exist in phenomena, it must be remembered that phenomena can only be so called when the manifold has been determined by the principles of the understanding. One of the assumptions of Hume which Kant is here concerned to expose is that things are given in their qualitative and quantitative determination as objects in space and time quite apart from intellectual synthesis. It is only when the data of sense are combined into one context of experience by necessary laws that they can be known as objects at all. Kant's rather perplexing treatment in this section is no doubt due to the fact that he appears to speak as though the phenomenal relations are first given apart from the categories, and that the categories then universalise these relations. But he has already dealt with the function of causality as a category, and is here concerned with the succession of phenomena considered in relative abstraction as an analogy of experience, i.e. an analogon of the pure unity of apperception.[1]

[1] Much of the criticism that has been directed upon this part of Kant's exposition seems to me to be due to a failure to do full justice to this special

Important, again, as illustrating this view of objects as empirical things (as contrasted with *Vorstellungen*) is the section in the second edition entitled *Refutation of Idealism*. The idealists, represented by Descartes, held that "the only immediate experience is internal experience," and that knowledge of external things is based on inference from the subjective processes of the individual mind. Kant would invert this order, and maintain that we do not infer the existence of outer phenomena, but rather that an outer phenomenon is the immediately given fact on the ground of which the individual subject becomes aware of the inner psychical processes through which knowledge of the object is acquired. The essence of his proof is that the determination of any event in time presupposes something permanent. No doubt the experience "I am" involves the existence of a subject, but there is no intuition of such subject; the experience "I am" has "not the slightest intuitive predicate, which, as permanent, could serve as the correlate of time-determination in inner sense". The only

point of view. Mr. H. A. Pritchard (*Kant's Theory of Knowledge*, Ch. XII), for instance, urges that "we do not first apprehend two perceptions of which the object is undetermined, and then decide that their object is a succession rather than a co-existence. Still less do we first apprehend two perceptions of presentations and then decide that they are related as successive events in the physical world. From the beginning we are aware of real elements, viz. of elements in nature, and we are aware of them as really related, viz. as successive in nature. . . . Unfortunately, instead of concluding that the apprehension of a succession is ultimate and underivable from a more primitive apprehension, he tries to formulate the nature of the process by which, starting from such a succession of perceptions, we reach the apprehension of a succession. The truth is that there is and can be no *process to* the apprehension of a succession; in other words, that we do and must apprehend a real succession immediately or not at all." But Kant does not and could not hold that we "*first* apprehend two perceptions, *and then* decide that they are related". He starts with the experience of sequence and inquires how we are to account for such experience, and his whole contention is that there is involved in this sequence, as the ground of its possibility, the universal and necessary (i.e. objective) rule—the law of causation. The understanding does not arbitrarily apply its law of causation to the experience of sequence, but rather experience is possible only because it is subject to this and other *a priori* laws. There is one determined order to which phenomena must belong, if they are to be phenomena for beings mentally endowed as we are, and the one rule of that determination is the law of causality.

permanent in the world of phenomena is matter (i.e. substance in our experience). "Consequently, the determination of my existence in time is possible only through the existence of real things which I perceive as external to me."[1] It is sufficient for our present purpose to emphasise the antithesis which Kant draws between "a thing outside me" (*einem Ding ausser mir*), and "the mere presentation of a thing outside me" (*der blossen Vorstellung eines Dinges ausser mir*),[2] the existence of the external thing being immediately certain since the perception contains given sense material.

The contention I would press is that the categories cannot be said to be *constitutive* of phenomena, if by "phenomena" be meant external objects in space, or empirical things. Once Kant has allowed that things exist outside and beyond our mental states, while we may still affirm that objects, in order to become objects of experience, must conform to the conditions of knowability, it is clear that these physical objects cannot owe their *constitution* to a transcendental unity of apperception.

Consider any existent entity, any object of experience, usually called a "thing". Of such an existent thing Kant would have said we can assert certain predicates. Thus, for

[1] Ber. III. 191. From the point of view of Kant's epistemology, the issue here raised is of course fundamental, and it is almost inexcusable that he should have left the matter thus. Here in one and the same section transcendental idealism and empirical realism both find place. Commentators from Kant's own day have been divided, some (Schulze, Kuno Fischer, Paulsen, Benno Erdmann, and Riehl) holding that Kant postulated things in themselves as affecting us, and generally contesting the possibility of affection through *Erscheinungsgegenstände*; others (Maimon, Fichte, Pastor Krause, and the Marburg School) consider that Kant meant that *Erscheinungsgegenstände* alone affect us. Vaihinger (whom Kemp Smith follows) seeks to escape from the dilemma by assuming that Kant intended to assert a double affection of the ego, namely by things in themselves and by *Erscheinungsgegenstände*. The doctrine of a double affection, though it is made central in Kant's posthumous fragments, cannot be said to have been present to Kant at the time of writing either the first or the second edition of the *Critique of Pure Reason*, and can probably only be regarded as a later expedient. In any event one is justified in taking it as tolerably certain that in the section on the *Refutation of Idealism* Kant is not concerned with *noumena*, but with actual empirical things existing "outside me".

[2] B 275. Cp. also the discussion of the fourth paralogism.

example, the thing is a substance, for it is only in and through the category of substance that an object can either be or be known at all; accordingly the category of substance is "constitutive" in respect to that object. It is, however, open to question whether an object or thing such as "this table" is constituted a substance in and by means of the category of substance; whether the category of substance is immanent, so to speak, in the table. Whether the table be anything more than the sum of its qualities is a problem that need not here be raised. Be it merely a "sum of qualities" or something in addition to a sum of qualities, in either case what is meant by the "substance of the table" is not the *category* of substance. The category of substance is, in Kant's phraseology, a concept or notion, and a concept is, by its very definition, dependent upon thought or intelligence; it is, namely, the way in which a universal is grasped or apprehended by thought. In his analysis of the structure of an object, Kant was virtually assuming the truth of the conceptualist doctrine, that universals are concepts or notions. The categories were just the most fundamental, the most ultimate, of universals to be met with in the realm of experience. They were the conceptual factors that must be superinduced upon the manifold of sense in order that the latter might be apprehended as qualities or characteristics of objects. Throughout, objectivity (the feature of standing over against a knowing subject) is identified by Kant with universality and necessity. An object is that which, as content apprehended, is common to individual minds, and which possesses features which are common to it and other objects. And the connecting link between "common to different objects" and "common to different minds" is apparently to be found in the thought of *Bewusstsein Überhaupt*, of consciousness in general, of which, in its relation to the manifold of sense, the categories are the ways of expression. The plausibility of this contention remains, however, only so long as an object is taken to be

a complex of presentations. The moment the judgment that a particular object exists is recognised as going beyond the presented content of the moment, and as implying in its very nature that which is distinguishable from such presented content, then, however true it may be and is that concepts are involved in the judgment, there is, on that account, no presumption that concepts are in like manner involved in the object to which the judgment refers. The reference to such judgment is, as Kant himself maintains, to a real existing thing distinct from the *presentation* of it, and which is not to be regarded as a thing-in-itself, but as a thing in space and time, as in fact "the movable in space". But with respect to such "empirical things" no justification whatsoever has been shown for supposing that the categories enter as such into their very structure.[1] The characters characterising an empirical thing in space may be either universals, or (as Stout urges)[2] no less particulars than the things thus characterised, but in neither case is there the slightest ground for describing them as concepts or thoughts. Because empirical things and their characteristics are known by means of concepts, it by no means follows that concepts are constitutive in regard to these empirical things. On the contrary, we are constrained, it seems to me, to distinguish between the truth about an existent thing and the existent thing itself. A concept belongs as such to the realm of truth, the characteristics of an empirical thing to the temporal order of fact in which numerous instances of universals are to be met with. Among the qualities of empirical things are the relations in which they stand to other empirical things, relations of causality and the like, but again these relations, whatever be their inherent nature, must be essentially different from the concepts by means of which they are apprehended. There is,

[1] Cp. G. Dawes Hicks, in *Proc. Arist. Soc.*, N.S., Vol. XX, 1920, pp. 152 seq.

[2] Cp. his paper on "The Nature of Universals and Propositions" (*Proc. of Brit. Academy*, Vol. X).

therefore, so far as I can see, no legitimate way of representing the categories as actually constitutive features of the realm of existent fact. The categories are logical instruments of thought, and their significance lies in the realm of knowledge.

It is one of the merits of Lotze's restatement of the Kantian position that he draws explicit attention to the confusion—a confusion which goes back to Plato—that may result from a failure to recognise the different sets of considerations that apply to the two distinct notions of validity and real existence. Thought, he argues, does not create fact, but interprets it by means of principles which are, so to speak, inherent in its very nature, principles which indeed Kant himself had brought to light. But the subjective movements of thought are not, Lotze points out, processes which actually take place in things, although, no doubt, the nature of those things is so constituted that thought, if pursued in accordance with its own logical laws, finds itself at the end of its journey coinciding with the actual course of the things themselves. It is true the matter cannot be left as Lotze left it. If the function of thought be to depict existing fact after its own manner and in accordance with its own laws, and if the content of thought stands, so to speak, over against the world of existent fact, as a *tertium quid*, knowledge *of* existent fact would seem to be precluded. Lotze was obliged to assume a kind of pre-established harmony between the empirical world and the forms of thought, or categories, in order to be assured of an intelligible world at all; and his road to knowledge of this world lay in a progressive attainment of order and coherence among the presented contents. Yet if the content of thought be still conceived as an arrangement of sense-data effected by notions, while the world of external things lies somehow beyond this content of thought, we should be stranded once more with Kant's two spheres of objects—that of *Vorstellungen* and that of empirical things. Such a view is not, how-

ever, inevitable. To deny to the categories a constitutive function in the world of existent fact does not involve the admission of another sphere of objects in which they are constitutive. There is but *one* world of objects, and what stands over against us to be known is not a world of discrete units requiring to be combined into wholes by the categories, but rather a world of existent facts amongst which there is already combination. Objectivity is not secured by the categories. That which comes to be recognised as an object is a primary datum of consciousness; and in the growth of conscious experience, apprehension of object and apprehension of subject advance correlatively and along parallel lines. Thus, to return to the category of causality, Kant's view was that the category of causality is prior to any concrete empirical fact of causality, for causality, as indeed every other way in which the transcendental unity of consciousness expresses itself, is the principle binding the data of sense into determinate order. It seems to me there are good reasons for maintaining that this is an inversion of the true order. Inspection of the process of knowing reveals that what comes first in experience is gradual discrimination of the concrete fact and of specific instances of connection in the concrete material gradually discriminated through the process of perception. Certain categories no doubt evince themselves as involved in the apprehension of fact; they cannot, however, be taken to subsist as *a priori* moulds or types to which given data are bound to conform. The categories are not *a priori* principles of the possibility of objects of experience, but rather principles which come to light as principles indispensable to the process of interpreting and unifying experience. They are recognised as necessary forms of experience not because they precede all experience, but because they have sprung from experience. In all our apprehension of reality, certain functions of the understanding, or ways of knowing, are implicitly involved. Brought to full light, these functions of knowing are recog-

nised as relational categories, or ways in which the knowing mind must interpret the data of experience. These categories are not brought to bear upon the data of sense, but are recognised as involved in our apprehension of reality. The categories do not determine things, nor are they actual pre-conditions of things. Our reflective thinking discovers them as logically involved in experience. Thus reflective thinking has revealed that all phenomenal events are causally connected. The principle of causality is not an absolutely *a priori* principle determining the causal relation, but the general expression of observed relations. If the given element were in itself primordially chaotic, it is difficult to see how it could ever be brought into subjection to any *a priori* forms. The forms, we must hold, are not supplied by the understanding in its act of determining the objects of experience, but are rather recognised by the understanding as it reflects upon its knowledge of those objects; and the fact that the understanding extracts from its objects certain fundamental ways in which those objects are given does not confer upon those categories an absolutely *a priori* character. Knowledge is knowledge of fact, and it is fact that lays constraint upon our thinking. "It is the real structure of things that controls and lies at the foundation of what we oppose thereto as the necessities of our thinking; and any theory which gives the prior place, as Kant's doctrine appears to do, to the necessities of thought, will find itself confronted with the same perplexing problem that Kant repeatedly had to face—the impossibility of finding any concrete material wherein those necessities of thought find a living sphere for themselves or to which they have application."[1]

[1] Adamson, *Development of Modern Philosophy*, Vol. I, p. 334.

CHAPTER VI

THE IDEAL OF PURE REASON

FROM the transcendental deduction it seemed to Kant to follow that metaphysics as a science is impossible, and if by metaphysics be meant the dogmatic metaphysics of rationalism, the conclusion no doubt follows. The understanding "makes nature"[1] at least in the restricted sense, that the universal and necessary principles of nature are valid because they are derived from the unity of consciousness to which all things knowable *a priori* must stand in relation. Just as space and time afford the possibility of knowledge *a priori* in respect of intuition, so the categories afford the possibility of such *a priori* knowledge as we can obtain in respect of nature at large. This *a priori* knowledge is obviously limited to the general laws of the phenomenal world. Nature (i.e. nature in general) is dependent on the categories as the only ground of the necessary conformability to law (*Gesetzmässigkeit*) exhibited in nature. In regard to experience in general and everything that can be cognised as an object thereof, these *a priori* laws are our only guide and rule.[2] Accordingly, the most that the understanding can achieve *a priori* is to anticipate the form of possible experience in general. And since that which is not appearance cannot be an object of experience, the understanding can never transcend those limits of sensibility within which alone objects are given to us.[3]

What is really implied in the critical position is, however, not the impossibility of metaphysics, but rather the substitution of an immanent metaphysics for the older transcendent

[1] A phrase of Green's which cannot be traced to the *Critique*. See *Mind*, Vol. XIII, p. 456, and Vol. XVII, p. 304. In Kant's posthumous writings, however, the thinking subject is frequently said to create (*schaffen*) for itself a world as *Gegenstand möglicher Erfahrung*. Reicke, XXI. 327, cp. 333, 345, 385. See also Adickes, *Kant's Opus Postumum*, pp. 140, 756, and 771.

[2] B 165. [3] A 246 = B 303.

metaphysics. Kant, like the rationalists, propounded a doctrine of valid *a priori* knowledge. His radical divergence from dogmatic rationalism consists in his rejection of the view that the *a priori* is capable of being deduced from the necessities of thought. Synthetic *a priori* judgments are rendered possible by reason of the operation of certain synthetic processes or ways in which the understanding determines objects generally, and the validity of these synthetic processes is established when it is shown that they are transcendentally involved in experience, i.e. that unless they be postulated, judgment (or consciousness of objects) is inexplicable. The ontological implication herein involved was only cursorily indicated in the *Analytic*. It is present in the doctrine of inner sense, in his treatment of which Kant is driven to postulate certain noumenal conditions both of the outer world and of the inner subjective life. It is present again in the discussion of the third analogy where the problem is to explain how from presentations which are in succession we can determine the objectively co-existent. From the *Nova Dilucidatio* to the *Dissertation* the *commercium* between substances had been grounded in their common origin from and dependence upon God. In the *Analytic*, the problem concerns the *Gemeinschaft* of appearances, and the perception of objective co-existence is shown to involve a *Verstandesbegriff*, namely the conception of objects as standing in a relation of reciprocal determination. Co-existence can be determined only as each and every existent is referred to the whole of systematic relations within which it finds place. But the question how knowledge is possible if the conditioned can be known only by reference to an unconditioned whole had not yet been raised. When, in the *Dialectic*, the wider metaphysical problem comes to view, Kant recognises that the apprehension of objective co-existence, involving as it does the category of reciprocal determination, likewise involves an Idea of Reason. Similar issues are again present in the section on *Phenomena und Noumena*. The fixing of a

limit to the objective employment of the categories implies a distinction between the realm of knowledge in the strict sense and a possible realm of things not subject to the formal conditions imposed by the understanding. And this is a distinction the ground of which must be sought in the nature of knowledge itself, for although for us all objects of knowledge are objects in space and time, it cannot be maintained that the restrictions of space and time apply to all knowledge whatsoever. The conception of *Noumenon* serves, then, as a *Grenzbegriff*, the idea of a limit to our actual knowledge. But the conception of *Noumenon* has a more positive significance.[1] The unity or connectedness which is rendered *possible* by reason of the unity of understanding is never fully attained in the actual experience of the finite subject, and this feature of incompleteness arises from a consideration of the boundlessness of the realm of outer experience and from the possibility that there may subsist in self-consciousness factors over and above those which are necessarily involved in our apprehension of phenomena, and makes inevitable[2] the attempt to conceive the whole of which subject and object are parts. Accordingly, there arises the notion of a realm of things-in-themselves whereby unity can be given to the life of self-consciousness, the noumenal realm being complementary to the phenomenal realm and constituting with the latter the one world of intelligible being or ultimate reality.

Accordingly, as Professor Kemp Smith remarks: "If everything known, in being correctly known, must be apprehended as appearance (i.e. as a subordinate existence within a more comprehensive reality), the distinction between the immanent and the transcendent falls within and not beyond the domain of our total experience. The meaning which our consciousness discloses in each of its judgments

[1] I omit here the thought (undoubtedly present in the *Critique*, but totally irreconcilable with the critical position) of the thing-in-itself as the cause of the phenomena.

[2] Cp. Professor G. Dawes Hicks, *op. cit.*, p. 167 ff.

is an essentially metaphysical one. The transcendent is merely a name for this immanent factor when it is falsely viewed as capable of isolation and of independent treatment. By Kant's own showing, the task of the *Dialectic* is not merely to refute the pretensions of transcendent metaphysics, but to develop the above general thesis, in confirmation of the positive conclusions established in the *Analytic*."[1] In the *Dialectic* itself, while the negative element bulks largely, the positive may be said ultimately to prevail.

The function of reason in its logical use is the subsumption of the multiplicity of the cognitions of the understanding under the smallest number of principles, and thus to obtain the highest possible unity[2]; or in other words, "to find for the conditioned cognition of the understanding the unconditioned wherein the unity of the former finds its completion". Such a principle is not analytic, for the notion of the unconditioned cannot be derived from the concept of the conditioned. It is an *a priori* synthetic principle which finds its source in Reason in its real use in isolation from all sensuous experience; and the problem of the *Dialectic* is to decide whether it is a mere logical maxim or whether it has objective validity.[3] According to the *Dissertation*, the concept of totality was one of the intellectual concepts or pure ideas deduced from the nature of the pure intellect,[4] not abstracted from sensuous elements, but abstracted from laws inherent in the mind itself. The *mutuum commercium* of many substances implies the concept of totality. "The unity in the conjunction of the substances of the universe is the consequence of their common dependence upon the One."[5] At this pre-critical stage Kant offered no clear formulation of the problem

[1] *Commentary*, p. liv. Kemp Smith further points out (p. 438) that Kant at first viewed the *Dialectic* as falling not within the *Doctrine of Elements*, but within the *Doctrine of Methods*. In accordance with this view, reason is merely the understanding in its transcendent employment. But his eventual inclusion of the *Dialectic* within the *Doctrine of Elements* indicates that he afterwards viewed reason as a faculty distinct from the understanding and yielding *a priori* concepts of its own.

[2] A 303 = B 359. [3] A 309 = B 365. [4] § 8. [5] § 20.

of the unconditioned, the relation between it and the conditioned being described in general as that of whole and part,[1] or of ground and consequence.[2] But several *Reflexionen*,[3] which Benno Erdmann has shown to belong to the period between the *Dissertation* and the *Critique*, show that Kant tended to think of the problem of infinity in terms of three *principia*, namely the relations of substance to accident, ground to consequent, and whole to parts.

In the *Critique* the formulation of the categories of relation in terms of substance, causality, and reciprocity provided another opportunity for Kant's skill in architectonic, and he proceeded to bring his treatment of the Idea of the unconditioned into connection with those categories. This he did, in the first place, by the help of a metaphysical deduction of the Ideas of reason. Just as the categories were discovered from a consideration of the forms of judgment—so the Ideas of reason arose from a consideration of the forms of syllogism. In the conclusion of a syllogism the predicate is connected with the subject on the presupposition that the major premise contains in its universality the condition under which the predicate is given. The concept of the conditioned presupposes the totality of the conditions, i.e. the unconditioned, as the ground of the connection of everything conditioned. In all the forms of the syllogism, thought moves through a regressive series of prosyllogisms back to an unconditioned. In the categorical, which expresses a synthesis of qualities in a subject, the movement is toward a subject which is itself no longer a predicate; in the hypothetical, toward a presupposition which itself presupposes nothing else; and in the disjunctive, to a system by means of which complete division in any notion may be determined.

Even so, Kant is not satisfied with formulating the problem of the Unconditioned, in accordance with the categories of relation, as unconditioned substance, unconditioned

[1] E.g. § 2. [2] E.g. §§ 17–20. [3] II. 567, 571, 578, 584–5.

causality, and unconditioned system, but he forthwith formulates this threefold problem of the Unconditioned as three problems involved respectively in the Ideas of the self, the world, and God. His passion for architectonic is unusually marked in the *Dialectic*. Had he followed the straight line of the critical inquiry, he might have been led to investigate in a very different manner those Ideas which are presupposed in the attempt on the part of reason to organise its total experience. As it was, he forced his discussion into the three divisions, rational psychology, rational cosmology, and rational theology; and the result is a hopeless cross-division. The concept of unconditioned substance cannot be restricted to the province of rational psychology without ignoring half the problems involved, nor is Kant able so to restrict it in his actual procedure. Again, the concept of unconditioned causality cannot be taken to be a cosmological problem only, and in the discussion of the Antinomies Kant passes beyond his own boundaries. Nor is the concept of unconditioned system to be regarded as necessarily a theological problem. The general problem of the *Dialectic* is essentially that which occupied Kant in the *Nova Dilucidatio*, namely the unconditioned or ultimate ground of the world of experience.

The Idea of unconditioned system was "metaphysically deduced" from the disjunctive form of syllogism, for the procedure of reason by which the transcendental Ideal becomes the basis of the determination of all possible things is analogous to that which reason follows in the disjunctive syllogism. The logical determination of a concept by reason is based upon a disjunctive syllogism in which the major premise contains a logical division (the division of the sphere of a general concept), the minor limits this sphere to a certain part, and the conclusion determines the concept through that part. The transcendental major of the complete determination of all things is nothing but a representation (*Vorstellung*) of the sum-total of all reality, a concept (*Begriff*)

which comprehends all predicates according to their transcendental content not *under itself* but *within itself*. And the complete determination of a thing depends upon the limiting of this total (*All*) of reality, some part of which is ascribed to the thing, while the remainder is excluded from it—a procedure which agrees with the *either . . . or* of a disjunctive major premise, and with the determination of the object through one of the members of that division in the minor premise.[1]

This artificial approach to the Ideal of pure reason led naturally to the introduction of the famous argument from possibility, recurrent in all Kant's metaphysical writings, from the *Nova Dilucidatio* to the *Vorlesungen über Metaphysik*. The starting-point is the *principium determinationis omnimodæ*. Take any concept you will: by the logical principle of determinability, which is based on the principle of contradiction, it may be affirmed that only one of two contradictory predicates can belong to that concept. It is further subject to the principle of *complete* determination according to which one of all possible predicates of things must belong to it—a principle based not upon the principle of contradiction, but upon the *a priori* condition that everything must stand in relation to the sum of possibilities conceived as the *Inbegriff* of the predicates of things. The principle of complete determination relates, then, not only to logical form but to content. It is the principle of the synthesis of all predicates which are required to constitute the complete concept of a thing. Its basis is "the transcendental presupposition of the material for all possibility, which must contain *a priori* the data for the particular possibility of any thing".[2] It follows that "to know a thing *completely*, one must know everything that is possible, and thereby determine it affirmatively or negatively. Consequently, this complete determination is a concept which we cannot present in its totality *in concreto*, and is based upon an Idea which has its

[1] A 577 = B 605. [2] A 573-4 = B 600-1.

seat solely in the Reason, which prescribes to the understanding the rule of its complete use." Further scrutiny of the *Inbegriff aller möglichen Prädicate* leads to the exclusion from it of a large number of merely derivative predicates. As contrasted with logical negation, which properly applies not to a concept, but only to the relation of one concept to another in a judgment, a transcendental negation denotes non-being, i.e. mere privation (*Mangel*). Negations cannot, however, be thought except in the light of opposite affirmations. "The ignorant man has no conception of his ignorance, because he has no conception of knowledge." All negative concepts are, therefore, derivative, and it is only the positive predicates that find place in the *Inbegriff aller möglichen Prädicate*. It is the realities that contain the material or transcendental content of the possibility and complete determination of all things.

Kant passes in bewildering fashion from the proposition that all negations are limitations, implying a positive reality, to the assertion that all the manifoldness of things consists only of so many modes of limiting the concept of the highest reality which forms their common substratum or stock-in-trade (*Vorrath des Stoffes*). From his premises it doubtless follows that in the determination of any concept there is presupposed a rational context—a systematic whole in which the particular concept finds its place. Kant's language sometimes indicates, however, that he is here thinking of the transcendental Ideal as an *ens realissimum* in the rationalistic sense of the term, i.e. as a being which embraces all reality. He falls short, however, of lapsing completely into Wolffian rationalism in his characterisation of the Ideal, for in the first place he has argued[1] that since there is real opposition among realities, they cannot in their totality exist in God as his predicates or determinations. The relation between empirical objects and the all-comprehensive unity cannot, therefore, properly be taken, as it was in the rough sketch

[1] A 273 = B 329. Cp. essay on *Negative Quantities, vide supra*, p. 69.

(*rohen Schattenrisse*)[1] to be that of contingent existents and *ens realissimum* regarded as embracing all reality. Still less can the *Urwesen* be said to consist of so many derivative beings, for they in truth presuppose the original being. We may now say, then, that "the ultimate reality forms the basis of the possibility of all things as a *ground* and not as a sum-total, and that the manifoldness of those things rests not upon the limitation of the primal being itself, but on the complete series of its consequents".[2] The ultimate reality must not be conceived as containing finite realities as ingredients, but rather as the systematic unity of that reality which is the material for all non-contradictory notions, the ultimate ground of the possibility of all that is conditioned. The unity is, of course, an *Ideal* unity, and Reason falls a victim to transcendental illusion when it infers therefrom an actually existent being. The principle that a thing is not an object for us unless it presupposes the whole of empirical reality as the condition of its possibility—a principle that is valid only of sensuous objects—is taken to be valid in regard to reality in general. We afterwards hypostatise this Idea of an *Inbegriff* of all reality by changing the distributive unity of the empirical use of our understanding into the collective unity of an empirical whole. The Idea of *ens realissimum* is first objectified, then hypostatised, and finally personified; for just as the regulative unity of experience rests upon the connection of the manifold through the understanding, so the complete determinability of things seems to lie in a supreme understanding, i.e. in a conscious intelligence.[3]

It is, of course, a necessary part of Kant's critical position that the ultimate being can no longer be taken, as in the *Nova Dilucidatio*, to exist *absolute necessario*. There is no necessary inference from the Idea of the unconditioned to the Idea of the absolutely necessary. The Unconditioned is one thing; the unconditionally necessary is quite another. In

[1] A 579 = B 607. [2] A 579 = B 607. [3] A 583n = B 611n.

one passage,[1] indeed, he raises the question whether the conception of an absolutely necessary being has any intelligible content. Reverting to its verbal definition as "something the non-existence of which is impossible", he urges that "to use the word unconditioned with a view to removing all those conditions which the understanding requires in order to conceive something as necessary does not in the least make clear to me whether I am still thinking anything, or not rather perhaps thinking nothing at all by the concept of unconditional necessity". Some have sought to vindicate the concept of absolute necessity by reference to geometrical propositions, but they have failed to see that the unconditioned necessity of geometrical propositions is a logical necessity, having reference to judgments and not to things. The absolute necessity of a judgment is only a conditioned necessity of the thing or of the predicate in the judgment. Thus in the proposition, A triangle has three angles,[2] nothing is affirmed about the absolute necessity of the three angles, but only that under the conditions of the existence of a triangle three angles are given in it by necessity. To accept a triangle while rejecting its three angles is a contradictory proceeding, but there is no contradiction in admitting the non-existence of the triangle and its three angles. The existence of a triangle is itself contingent. The same applies to the concept of an absolutely necessary being. If such a being were admitted, it would doubtless be contradictory to deny, say, his almightiness, but no contradiction is involved in denying the existence of such a being, and if his existence be denied, all his predicates are annulled. The proposition, God exists, like every other existential proposition, is synthetical.

It might be argued that the concept of the most real being (*ens realissimum*) is the one and only concept in regard to

[1] On the impossibility of an ontological proof. A 592 = B 620.

[2] Kant has in mind the Wolffian doctrine that essentiæ rerum sunt absolute necessariæ. *Ontol.*, sect. 303 Cp. Baumgarten, *Met.*, sect. 106.

which the denial of the existence of its object would involve self-contradiction. This, of course, is the ontological argument. Kant himself formulates it thus: The concept of *ens realissimum* possesses all reality; reality comprehends existence, and therefore existence is contained in the concept of a possible thing. If that thing were annulled, the possibility of that thing would likewise be annulled, and this is self-contradictory. He has no difficulty in exposing the fallacy involved in this *blosse Neuerung des Schulwitz.*[1] He points out (as in the *Nova Dilucidatio* and the *Beweisgrund*) the absurdity of introducing into the concept of a thing, which is thought solely in regard to its possibility, the concept of its existence. If the proposition "this thing exists" be analytical, no addition is made to the subject of one's thought by the affirmation of existence; the concept and the thing are one and the same. And if, "as every reasonable person must admit", an existential proposition must be synthetical, then how can it be maintained that the predicate of existence cannot be denied without contradiction? Existence, Kant repeats, is never a real predicate. A hundred Thalers contain no more than a hundred possible Thalers. Consequently, if I say that God exists, I add no new predicate to the concept of God. In the realm of sense-perception, of course, we cannot confound the concept with the existence of a thing, but when we are shut up to the contents of pure thought, we have no means of establishing the existence of an object corresponding thereto.

Kant's formulation of the ontological argument, and still more his treatment of it, reveals an extraordinarily imperfect grasp of the significance of the argument as such, and serves to perpetuate a confusion which goes back at least as far as the discussion between Anselm and Gaunilo. Anselm, in arguing from the concept of God as *id quo nihil maius cogitari potest* to God's necessary existence, undoubtedly

[1] A 603 = B 631.

had in mind[1] the qualitatively unique being whose existence was held to be the necessary presupposition of all other things. He meant to demonstrate that in this one unique instance the distinction of essence and existence disappears. Doubtless Locke was right when he said,[2] in reference to this argument, that "it is an ill way of establishing this truth . . . to lay the whole stress of so important a point as this upon that sole foundation". Doubtless also Anselm failed to show how even in regard to God an existential conclusion can follow from analytical premises. Yet the real question involved in Anselm's argument is as to whether we must not posit a supreme *Urgund* or *ens realissimum* in some form as the necessary presupposition of things, and to this important aspect of the argument Kant gives a thorough assent.

When we turn to the question whether in truth the Idea of the Unconditioned is objectively valid or not, whether the "prototype whence the ectypes receive the material of their possibility" is anything more than a mere Ideal, we are confronted by an elaborate argumentation in which two conflicting lines are so closely interwoven that it is only with great difficulty that they can be disentangled. The one line of inquiry, conducted under the inspiration of Kant's earlier view of Reason as a transcendent use of the understanding, issues in a sceptical view of the validity of its Ideas. Whether the Ideal be conceived as *ens originarium*, *ens*

[1] His failure to define the term *maius* in the *Proslogium* has led to misinterpretation not only by his contemporaries, but later by writers like Hobbes, Huet, and Gassendi. In his earlier work, the *Monologium*, he had, however, expressly defined the term. There he writes of the supremely good which is also the supremely great: Dico autem non magnum spatio, ut est corpus aliquod; sed quod quanto maius, tanto melius est aut dignius, ut est sapientia. Et quoniam non potest esse summe magnum, nisi id quod est summe bonum, necesse est aliquid esse maximum et optimum, id est summum omnium quæ sunt. Anselm was considerably influenced by St. Augustine, and it seems quite likely that the ontological argument was suggested to Anselm by a notable passage in *De Trinitate*, Lib. VIII, Cap. III. Cp. L. F. H. Bouchitté: *Le Rationalisme chrétien à la fin du XI^e siècle, ou Monologium et Proslogium de Saint Anselme . . . sur l'Essence divine*, 1842, Introduction.

[2] *Essay Concerning Human Understanding*, p. 529. (Ward, Lock and Co.)

summum, or *ens entium*, none of these terms indicates the relation of an actually existing object to other things, but merely that of an Idea to concepts. The other line of consideration, founded on a deeper and broader analysis of the facts of experience, and of the function of reason in knowledge, yields a more positive conception of the validity of the Ideas. Consideration of these two lines of treatment may best be deferred, however, until the content of the Idea of God has been more fully determined. This latter task requires some detailed examination of Kant's general contention that the facts respectively of contingency, purposiveness, and moral obligation require for their explanation the Idea of a suprasensible ground.

C. THE CONTENT AND VALIDITY OF THE IDEA OF GOD

CHAPTER VII

THE CONTINGENCY OF THE PHENOMENAL WORLD

THE conflict presented in the third and fourth antinomies of pure reason arises out of the attempt to conceive the Unconditioned in respect of (*a*) the origin of phenomena, and (*b*) the contingency or dependent existence of the variable in phenomena. As regards the former, the assertion of universal causation according to natural law seems with equal right to confront the assertion that not only mechanical causes but also free causes must be admitted. As regards the latter we seem able to answer in either way the question whether in connection with the world an absolute necessary[1] being must be postulated or must not be postulated. In these two antinomies the theses and antitheses are alike based on the principle of causality. The thesis in each case maintains that causality implies a first cause or necessary being, for since every state presupposes a precedent state, and that state in turn presupposes a still earlier one, and so on, there can be no completion of the series such as is demanded by the law of sufficient reason, unless an absolute spontaneity of causes and an absolutely necessary being be admitted. The antitheses assert that causality is incompatible with both these notions, for since every event or state depends upon a prior event or state, we cannot in the nature of the case ever reach an unconditioned event or state.

The fact that thesis and antithesis both rest upon one and the same principle clearly indicates that at least one of the two proofs is invalid. Two opposite inferences cannot proceed from one and the same basis.[2] Kant himself was

[1] Kant here gratuitously introduces into the concept of unconditioned being the element of absolute necessity, a position which he severely criticises later. *Vide supra*, p. 122.

[2] In point of fact both proofs are invalid; the proof of the thesis because the principle of causality is in no sense rendered self-contradictory by reason

aware of the strange situation here created, and sought to defend it by affirming[1] that human reason frequently falls into conflict with itself through considering its object from two different points of view. But it is essential to his treatment of the antinomies in the sections under review[2] that the judgments which they comprise are made from one and the same point of view. In thesis and antithesis the first cause or necessary being is viewed as the ultimate member of a series. The conflict arises from the fact that in regard to the contemplated series, reason reaches after a unity (expressed in the thesis) which is rejected by the understanding (in the antithesis). Kant is here viewing Reason as just the understanding in its effort to extend its concepts beyond the limits of experience.[3] In consequence, the problems are conceived to lie within the limits of phenomenal conditions, and the opposition presented in the antinomies appears to be that of irresolvable contradictories. He maintains that the radical contradiction is traceable to the concealed assumption that the notions involved in the antinomies have and must have objects corresponding to them. The world, whether in its quantitative aspect or in its aspect of a connected system of interdependent facts, is viewed *in abstracto* as an independently existing thing possessing those properties which seem to be implied in the content of the pure notions of the understanding whereby we think that world. But when, in accordance with the critical view, the pure notions of the understanding are regarded as having significance only in reference to that synthesis of presentations which constitutes for us experience, we shall no longer regard the world as an independently existing whole. "Phenomena in their apprehension are themselves nothing but an

of the fact that the series cannot be given as complete, and the proof of the antithesis is inadmissible here inasmuch as it depends for its support upon the critical view of nature as "reciprocally determining and determined in accordance with general laws"—an illegitimate procedure where the antinomies in question are held to be incident to dogmatic modes of thought.

[1] A 459 = B 487. [2] But *vide infra*, pp. 134 ff. [3] A 409 = B 435.

empirical synthesis (in space and time), and are given therefore *in that synthesis only.*"[1] It does not follow that if the conditioned is given the synthesis also that constitutes its empirical condition is thereby at the same time given. All that we are entitled to say is that a regress to the conditions, i.e. a continued empirical synthesis in that direction, is *required.* The opposition expressed in the antinomies is shown, then, to be "dialectical" and not "analytical"; it is due to an illusion produced by applying the idea of absolute totality, which serves only as a condition of things in themselves, to phenomena which exist only in presentation (*Vorstellung*).[2] This "sceptical method", as Kant calls it, "gets rid of a lot of dogmatic rubbish" by showing that the cosmological idea is "always either too large or too small for the empirical regress, and therefore for every possible concept of the understanding". Thus, if the world has no first cause, the regress is too large for any empirical concept, while if on the other hand it has a first cause (or necessary being), such an existence is bound to be conceived as dependent upon an antecedent existence, i.e. the given totality of connection is too small for the empirical concept. It is experience alone, he contends, that can impart reality to our concepts; without experience a concept is a mere idea without truth and without any reference to an object. The possible empirical concept is the standard by which to judge whether the idea is a mere *Gedankending* or whether it finds its object in the world.[3]

Accordingly Kant finds a whole nest of dialectical assumptions in the inference made in the so-called cosmological argument, from contingent to necessary being. In the first place, the principle that every contingent thing must have a cause is valid only within the world of experience. Within that context it is doubtless permissible to regard every event

[1] The view of phenomena as mental states is nakedly presented in these sections.

[2] A 506 = B 534.

[3] A 489 = B 517.

as contingent, but it is illegitimate to apply to the world as a whole a category which has been shown to be valid only within that world. That would involve treating the whole world as an object of experience, and it could never be so regarded except by the help of the fallacious principle that if the conditioned be given, the whole series of conditions up to the conditioned is likewise given. In the second place, to base an inference to a first cause on the impossibility of an infinite series of empirical causes is an illicit procedure, for since the series is not given, it cannot be determined as either infinite or finite. All that can be said is that the regress to the Unconditioned is demanded.

The fact that I am obliged to think something as necessary for the existence of things, and yet at the same time that I am not justified in thinking of anything as in itself necessary, indicates, so it is argued, that the concepts of necessity and contingency do not concern things themselves; they are not objective principles, but they are subjective principles of reason, according to which we may on the one hand search for an unconditioned necessity as the ground of the given, and yet, on the other hand, can never hope for such a completion, i.e. never admit anything empirical as unconditioned.[1] In this manner both principles are pronounced to be purely heuristic and regulative. The one tells us that we ought to philosophise about nature *as if* there were a necessary first ground of everything that exists, if only in order to introduce systematic unity into our knowledge. The other warns us against regarding any single determination concerning the existence of things as a supreme ground, i.e. as absolutely necessary, and so bids us keep the way open for further derivation and to regard every determination as determined by some other.

From this point of view, then, the Idea of a supreme being is a regulative principle of reason in the light of which we consider all connection in the world *as if* it arose from

[1] A 616 = B 644.

an all-sufficient necessary cause (*Ursache*); it does not involve the assertion of an existent entity necessary in itself. We are led by transcendental *subreptio* to think the systematic unity as hypostatised in the form of an *ens realissimum*, and so to change our regulative principle into a constitutive principle; but the illegitimacy of such a procedure becomes evident at once, for as soon as I regard this supreme being which with respect to the world was absolutely (unconditionally) necessary, as a thing in itself (*Ding für sich*), that necessity cannot even be conceived.[1] Consequently, it can be present to the mind only as a formal condition of thought and not as a material and substantial condition of existence.

Throughout this "sceptical" line of treatment Kant is working with the conception of reason as the understanding making a transcendent use of its concepts, and it was with this restricted view of the nature of the conflict between understanding and reason that he entered upon the thankless task of discussing the possibility of arriving at an unconditioned within the realm of phenomena. The principle of pure reason is not determinative in respect of the world, nor does it enable us to extend the concept of the world of sense beyond all possible experience. It retains its validity only as a *problem* for the understanding, leading it to undertake and to continue the regress in the series of conditions of anything given as conditioned. As a rule (*Regel*) it supplies guidance for the understanding in regard to the empirical regress, but it does not anticipate, prior to the regress, what is actually given in the object. The principle of pure reason is a regulative principle; it prescribes to the regressive synthesis in the series of conditions a rule according to which that synthesis may advance from the conditioned, through all subordinate conditions, towards the Unconditioned, though it can never reach it, for the absolutely Unconditioned can never be met with in experience.[2]

The position thus outlined does not, however, represent

[1] I.e. has no intelligible content. *Vide supra*, p. 122. [2] A 510 = B 538.

Kant's final view. In Section IX of the chapter on the *Antinomy of Pure Reason*, a section which Adickes has shown to be of later date than the preceding sections of the chapter, the contest in which Reason is implicated is reopened. The *Streithandel* had before been dismissed because both sides relied upon false presuppositions.[1] In respect of the dynamical antinomies, however, "the judge himself having made good the deficiency of legal grounds", the suit may possibly be adjusted to the satisfaction both of the understanding and of reason. The synthesis in the dynamical series is not, as in the mathematical, homogeneous. The dynamical series of conditions admits of a heterogeneous condition which is not a part of the series, but *als bloss intelligibel*, lies outside that series. While, therefore, there is no possibility of holding either thesis or antithesis of the mathematical antinomies to be true (because all the links in their respective series are phenomenal links), in regard to the dynamical antinomies it is possible that thesis and antithesis *may* in both cases be true, each in its own sphere; the antithesis applying solely to the rule according to which we must in experience connect phenomena with one another, the thesis owing its status to the "never to be forgotten" consideration that phenomena cannot forthwith be taken as exhausting the entire sphere of intelligible reality.

What is important here is not so much the distinction between the status of the mathematical and dynamical antinomies, a distinction which can readily be shown[2] to be extremely artificial and unsatisfactory, but rather the independent status assigned to Reason, and the recognition (wavering though it be) of the fact that for the explanation of experience the Ideas of Reason are no less indispensable than the categories of the understanding. Having forced the problems of a first cause and a necessary being within the

[1] Kant had previously declared (Sect. VII) that in these antinomies theses and antitheses are alike false, since one and all rest upon the principle that in regard to the "given conditioned" the totality of its conditions is given.

[2] Cp. Kemp Smith, *Commentary*, pp. 510–11.

sphere of cosmological problems, Kant was unable in the earlier sections to explain the antinomies as being due to the neglect of the distinction between phenomena and things in themselves. Taking his stand upon the synthesis of empirical conditions, he had declared the cosmological Idea to be either too large or too small for the empirical regress. But now he comes within sight of certain considerations which presently led to the view, already foreshadowed in the section on *Phenomena und Noumena*, that the unity achieved by the understanding through its categories falls short of the complete unity for which Reason is everywhere driven to seek. In and through the categories it is doubtless possible for an empirical conscious subject, correlated with an empirical object, to co-ordinate its inner and outer experience. But every part of this experience, when looked at from a wider point of view, exhibits marks which clearly indicate that something more is required in order to give complete satisfaction to the effort of the conscious subject to work his experience together into one systematic whole. Hence there arises the notion of an intelligible world, making up with the world of phenomena the one whole of intelligible reality. From this point of view the Idea of the Unconditioned is not merely an imaginary extension of the realm of phenomena (for completeness could not be attained in that way), but rather a notion logically prior to the notion of the conditioned. It is not formed empirically from a contemplation of the incomplete and the conditioned, but it is involved *a priori* in the very notion of the incomplete and the conditioned. It is only in and through this Idea of Reason that we can ever come to know the phenomenal character of the world of sense-experience.

Thus the argument in Section IX is wholly different from that of the earlier sections.[1] The question raised in regard to the third and fourth antinomies was the problem whether

[1] The latter part of Section I, however, must be regarded as of later date than the former part.

the conditioned implies an Unconditioned as its ground. The Ideas of first cause and unconditioned necessity fitted into the scheme produced by the deduction of the Ideas from the three forms of syllogism only if those Ideas be conceived as "directed only to that which is unconditioned among phenomena".[1] Accordingly the third and fourth antinomies were conceived to be concerned with the possibility or otherwise of an unconditioned causality or absolutely necessary being within the realm of phenomena. In Section IX the scheme is, however, partly broken through, and the wider problem of ultimate ground is introduced. Yet with confusion. The antinomy is now presented in a very different way as the dialectical opposition between phenomenal and noumenal causality, that is, the distinction between appearance and reality is brought in to solve the antinomy. In two ways Kant sees that free causality may be allowed, namely in respect of a first cause of the whole realm of natural phenomena, and also in respect of a finite being regarded as a free agent. It was only his architectonic that led him to discuss the possibility of human freedom in connection with the general cosmological problem, and I shall therefore defer its consideration until it presents itself in wider form in the *Critique of Practical Reason*. Again, the wider problem, the notion, namely, of a first cause, is one with and the same as the problem of an ultimate ground or an unconditionally necessary being, and this is the problem of the fourth antinomy. The escape from this antinomy lies in the consideration that while things belonging to the world of sense are throughout contingent, yet the series in its entirety may rest upon an unconditionally necessary being.[2] Such a being would have to be conceived as *ens extramundanum*, free from empirical conditions, and furthermore as containing the ground of the possibility of pheno-

[1] A 419 = B 447.

[2] A 560 = B 588. Previously it was formulated in terms of unconditioned causality, i.e. the *totalitas absoluta* of the empirical series. *Reflexion.*, II. 1252.

mena. In this way the thesis and antithesis may both be true, each in its own sphere. The complete contingency of things in nature and all their (empirical) conditions may well co-exist with the arbitrary (*willkürlichen*) presupposition of a necessary, though purely intelligible, condition.

This new line of consideration places, then, the antinomy of pure reason in quite a different setting. No longer is it conceived as an irreconcilable conflict between the understanding and Reason. The Idea of the unconditioned has a positive significance, for since the conditioned existence of appearances is not grounded in itself, we are bound to look for an intelligible object in which there is no contingency, and in which contingency itself is grounded.[1] And if the notion of the conditioned presupposes the Idea of the Unconditioned, the latter is, at its own level, transcendentally involved in experience.

Accordingly, the real significance of the Idea of a first cause comes to light only as it is recognised that the whole realm of phenomenal events necessarily connected in space and time presupposes an ultimate ground. So long as we are moving within the phenomenal realm it is of course impossible that we should encounter anything which is not itself a member of the phenomenal series. Along this series, even if it were possible, without involving a *μετάβασις εἰς ἄλλο γένος*, to arrive at a God, he would be simply *primus inter pares*. But unless a radical contingency is to be admitted at the very heart of things, there must be admitted a spontaneity which is not a member of the contingent series. From its earliest formulation, the cosmological argument has been concerned less with the chronological than with the logical dependence of the world upon God conceived as *πρῶτον κινοῦν ἀκίνητον*. Curiously enough, when Kant spoke of the first state of the world as a fount and gushing spring (*fons et scaturigo*),[2] he was using the very figure by which Plotinus[3] illustrated the "emanation" of the various orders

[1] A 566 = B 594. [2] Ber. I. 403. [3] *Enneades*, V. ix. 4.

of being from God. The spring, in overflowing, produces that which comes after it, and this in turn gives rise to the next stage and so forth. There is no actual dispersion of the higher into the lower forms, no diminution of the higher in giving rise to the lower. The order throughout is not a temporal, but a logical order of causation.[1]

Now, from his earliest work onwards Kant tended to regard causation (as distinct from logical ground) in linear fashion. He spoke freely of a series, a *catena*, a concatenation of events, as if effect followed cause in the manner in which link follows link in a chain. But causation is not such a simple matter. Every event in the world is inextricably woven with other events; it has no cause, but only causes; and an exhaustive statement of those causes would simply be a complete description of the entire realm of events. Phenomena are interconnected in an infinite *web*, not strung along a number of straight lines. The question of the *vera causa* of any phenomenon is therefore strictly the question of the ultimate ground, the *principium* or ἀρχη of the universe as a whole. In the first *Critique* Kant regards causality as the temporal schema of the logical category of ground and consequent; he is clear that the logical ground of causal connection (in the phenomenal sphere) lies behind the closed door of the noumenal realm. It is, of course, one of the central difficulties of Kant's position that he should be able to deny that there is any logical connection between particular causes and effects in the phenomenal sphere, and yet to maintain that noumena are required to account for the realm of phenomena. If, however, we reject the view of an intelligible world[2] subsisting in absolute isolation from the phenomenal world, we may find room for more adequate conceptions of cause and ground respectively. Our concept of the cause of an event will include those features which are relevant from the standpoint of

[1] Cp. Proclus, *Στοιχείωσις Θεολογική*, sects. 11 and 14.

[2] *Vide infra*, pp. 172 ff.

our particular inquiry. Pursuing these causes backward and outward beyond the bounds of empirical observation, we are obliged to conceive an ultimate principle of explanation, and this we may call the *Ground*. In the light of this ground, supposing we could ever know it fully, all the complexity of phenomena would be unified. Again, let it be said, there is no difference in kind between the concept of cause and that of ground; both arise out of the constraint of objective fact, while their difference lies in the fact that the former acquires the more precise content (though even in its case the content is never completely determinable) because it has been determined by selective interest. Kant, as we have seen, never entertained any doubt about the demand on the part of reason for an intelligible ground of the phenomenal world. The epistemological difficulty being removed, we have his word for it that the "whole totality of the series" as contrasted with the items in the contingent series may require us to posit the existence of a necessary being as ground. The only reason for denying full validity to this conception thus forced upon him was that the *ens realissimum* could not, consistently with his premises, be an object of experience. But if it be granted that all our concepts, whether categories or Ideas, are justified by their indispensability for the task of organising experience, then the concept to which the cosmological argument points must be admitted as a concept of something real. This does not for a moment mean that a first cause exists. It will in truth mean that a first cause in the sense of the first of a series of empirical circumstances cannot exist. The very notion of a first cause violates any and every conception of causality.[1] The question of the origin of the chain of empirical events appears to be for ever outside the scope of reason. What the argument does mean is that the only escape from the antinomies involved

[1] The term originated from a misunderstanding of a phrase of Aristotle's. When he spoke of God as πρωτὴ αἰτια he meant not cause in the modern sense of the term, but the ultimate ground of nature.

in our sense-experience lies in the notion of a whole which is itself free from the limitations attaching to the parts. Beginning and end are notions which apply only to the phenomenal realm and have no application to the world as a whole. Time, space, quantity, change, and so forth, are notions which cannot be applied to the whole in the same sense as to the phenomenal series, for all these notions imply relations, and in the case of the whole there is nothing extraneous to which it can be related. It is only against the background of the unconditioned that the conditioned is rendered intelligible.

It was due to his violent separation of the phenomenal and noumenal realms, and his description of the latter as intelligible (which in this instance meant unknowable) that Kant was prevented from seeing the true metaphysical issue here involved—the question, namely, of the kind of whole which is here implied, whether an absolutely unchangeable whole whose phenomenal manifestations constitute a perpetual reshuffling of invariant elements, or whether a whole which is eternally productive of consequences, or again whether a whole which is in itself capable of development from within.[1] On these questions Kant has less to say in the critical period than in the pre-critical, but contents himself with the vague assertion that the facts of the phenomenal world compel us to form for ourselves the Idea of an ultimate ground. Nor does he do justice to the question whether there is implied in the notion of unconditioned ground the further notion of ultimate rational agency, i.e. of God. The main force of his attack upon the cosmological argument for the existence of God is directed against the ontological pretensions which he conceives to lurk in that argument. He is concerned less with the inference *from the conditioned* to the Unconditioned than with the *inference from the conditioned* to the absolutely necessary. The argument is to the effect that the existence of anything

[1] *Vide infra*, p. 192.

leads Reason to posit the existence of a being which, *because unconditioned*, must be taken to exist with absolute necessity, and this argument depends for its plausibility on the contention that the only concept which neither requires nor is capable of any condition is the concept of a being of the highest reality (*ens realissimum*). And "as the unlimited *All* is absolute unity, and implies the concept of a being one and supreme, Reason concludes that the supreme being, as original ground (*Urgrund*) of all things, must exist with absolute necessity".[1]

It is true, Kant remarks, that if we had previously demonstrated the existence of some one necessary being, we could not do better than think of such a being as the source of all possible things. But, as already pointed out,[2] the concept of unconditioned necessity has no intelligible content, for the annulling of all conditions empties it of content and so annuls the very concept of necessity. And, further, the argument involves the assumption that a limited being cannot be conceived as absolutely necessary. Apart from the illegitimate inference from any given existent to the existence of an unconditionally necessary being; apart also from the doubtful assumption that a being which contains all reality and all conditions must be regarded as absolutely unconditioned, it cannot be taken for granted that a concept of a limited being is contradictory to absolute necessity. The existence of limited being is not necessarily a conditioned existence. Every limited being may be unconditionally necessary.

There is a still more damaging criticism. Kant insists that the whole attempt to extract a conclusion of absolutely necessary existence from the fact of contingent being is fruitless. The empirical datum is in truth not the real basis of the argument,[3] for resort is immediately made to the sphere of pure concepts. Reason seeks for the concept of a being which contains within itself the requisite conditions of

[1] A 586 = B 614. [2] *Vide supra*, p. 122. [3] Cp. *Beweisgrund*, Ber. II. 158.

absolute necessity, and, finding it only in the conception of an *ens realissimum*, concludes that this must be the absolutely necessary being.[1] It is assumed that a concept of a being of the highest reality is completely adequate to the concept of absolutely necessary existence, so that the former may be deduced from the latter. It is implied that "most real being" is one and the same with "absolutely necessary being"; that the concept of *ens realissimum* must carry with it absolute necessity. But this is precisely what was maintained in the ontological argument. "The trick of the cosmological proof consists merely in trying to avoid the proof of the existence of a necessary being *a priori* by mere concepts." The concept of the highest being may satisfy all questions *a priori* regarding the internal determination of a thing, and as such it is an ideal without equal (*ohne Gleichen*). But, so Kant maintains, it does not solve the really important problem regarding its own existence, and this is the problem which we have deferred until our delineation of the content of the Idea of God is complete.

[1] A 607 = B 634.

CHAPTER VIII

THE PURPOSIVENESS DISPLAYED IN NATURE

THE *Analytic of Principles* in the first *Critique* laid down the conditions under which the concepts of the understanding can be applied to the data of sense. Judgment (*Urteilskraft*) of every kind Kant there views as the faculty of bringing particular cases under general rules. The claim of the transcendental philosophy is that it is able to indicate not only the rule (or rather the general condition of the rule) which is given in the pure concept of the understanding, but at the same time to indicate *a priori* the cases to which the rule should be applied. Now when particulars are subsumed under categories emanating from the understanding, when, that is to say, the judgment starts as it were from the universal supplied by the understanding and specifies that universal by reference to particular data supplied in perception, the judgment is, to use the language of the third *Critique*, determinant. It is one of the principal objects of the *Critique of Judgment* to show that the determining judgment, or the faculty of judgment as employed in the schematised categories, though it expresses the universal conditions under which any experience is possible, does not yield complete knowledge of nature. The principles of the understanding do not enable the faculty of judgment to subsume the innumerable diversities in the particulars under specific laws such as the special sciences are engaged in discovering. These specific laws are empirical; they are not given, as the categories are, in and through experience itself, but have been discovered. It cannot be shown that without them we should have no experience at all, yet in order that we should discover specific laws there must be some principle which regulates our procedure. This principle cannot be obtained by the *Urteilskraft* from experience, because it is the very function of the *Urteilskraft* to establish

the "unity of all empirical principles under higher though likewise empirical principles, and thus to render possible the systematic subordination of the lower under the higher". Moreover, Kant contends that the *Urteilskraft* cannot derive such principles from the understanding, for then it would become a determining principle[1]; there remains therefore no other alternative than that the *Urteilskraft* prescribe this transcendental principle to itself, and in so doing become reflective.

Already in the first *Critique*[2] Kant had called attention to the principles of homogeneity, specification, and affinity (or continuity), which Reason in its regulative use necessarily employs in its search for systematic completeness. In the Introduction to the third *Critique* he has mainly in view the second of these principles. He contemplates nature as an organic system the parts of which are determined by specific laws. We must assume, he contends,[3] that nature specialises its general laws into empirical laws in accordance with the form of a logical system for the sake of the faculty of judgment, for without such assumption there would be no guiding thread by which Reason could pursue its investigation of nature. Were there not this "technique" in nature, the categories and the contingent diversity of the particulars would for ever stand apart. The *Urteilskraft* represents, then, nature as though a notion or plan were the ground of its manifold empirical laws. Nature, in short, is regarded by the reflective judgment as teleological; its empirical laws may be regarded as if they were prescribed by an intuitive understanding as their lawgiver. The *Zweckmässigkeit* of nature cannot forthwith be taken to indicate actual

[1] This pedantic distinction between *die reflectirende und die bestimmende Urteilskraft* is, taken by itself, a mere *petitio principii*. A principle which reason must necessarily employ is surely as valid as any determining principle can well be.

[2] *Anhang zur transcendentalen Dialektik.*

[3] Die Natur specificirt ihre allgemeinen Gesetze zu empirischen gemäss der Form eines logischen Systems zum Behuf der Urteilskraft. *Über Philosophie* ü. Hart., VI. 385.

design, for that would import into natural science a new causality.[1] Consequently, all that we are entitled to say is that the principle of *Zweckmässigkeit* is a regulative principle for the reflective judgment; not an *a priori* determining principle of things, but a rule for judging about (*beurtheilen*) things.

Within the principle of purposiveness thus conceived as a rule of *Beurtheilung*, Kant distinguishes between objective purposiveness, in accordance with which the phenomenon is judged to be purposive in respect of its own existence (i.e. its purpose is judged to consist in being what it is), and subjective purposiveness, according to which it is held to be purposive in respect only of our appreciation.[2] The latter is the case in æsthetic judgments,[3] the former in teleological judgments. In regard to the teleological judgment

[1] Ber. V. 360.

[2] The link between the two (and therefore between the two sections of the third *Critique*) is the conception of *Zweckmässigkeit*.

[3] Between the realms of nature and freedom was a great gulf. "The *Freiheitsbegriff* determines nothing in respect of the theoretical knowledge of nature; the *Naturbegriff* determines nothing in respect of the practical law of freedom." Unable to rest in such a hopeless dualism, Kant searched for a link between the two realms. By the year 1787 (Letter to Reinhold, 28/12/1787) he believed himself to be ready with a solution. He had now taken his stand with Mendelssohn and Tetens as against Wolff in accepting the trichotomy of mental faculties, and in accordance with the psychology of his day he regarded those faculties as actually separate. The first *Critique* disclosed the *a priori* principles for the faculty of knowing and the second for the faculty of will. His genius for intermediaries now led him to see that just as feeling stood midway between the cognitive and conative faculties, so the faculty of *Urteilskraft* stood midway between Understanding and Reason. Understanding supplies categories of *Gesetzmässigkeit*, Judgment supplies the notion of *Zweckmässigkeit*, and Reason supplies the Idea of *Endzweck*. In regard to æsthetic judgments, Kant seeks to retain their objective significance without doing violence to their essentially subjective basis. Accordingly he insists that æsthetic judgments, which rest upon a certain individual feeling, arise from the adaptation to one another of the sensuous particular and the conceptual universal. And, seeing that "adaptedness" is a notion which completely transcends the notion of the mechanism of nature, the ground of such adaptation is to be sought only in a suprasensible basis of phenomena. The purposiveness which the beautiful object exhibits is, therefore, the suprasensuous in the sensuous, and the æsthetic judgment is grounded upon the idea of a suprasensible substratum of phenomena (*vide* § 49). Kant here goes far beyond that determination of an object which finds in it only a multiplicity of sense-data combined by the notions of the understanding. The beautiful object becomes in fact what Schiller called *die Ausführbarkeit des Unendlichen in der Endlichkeit*.

there is a further distinction between inner and outer purposiveness of a material kind.[1] In the former case the thing in question has no end other than its own existence; in the latter it exists on account of other things which it serves by its existence. If we try to follow the clue of such outer or relative purposiveness we are speedily convinced of its ineptitude as a teleological principle, for the chain of means and ends runs on from phenomenon to phenomenon, and finally forces upon us the question of an ultimate end which is not a means—the *Endzweck* of creation; and that is a question that transcends all the limits of natural observation and lies therefore beyond the range of the teleological faculty of judgment.[2] But it is otherwise with material purposiveness of an inner kind. The organism is unique in being a *Naturzweck*[3]; it is both cause and effect of itself. The whole determines the parts and the parts the whole. The organism, like everything else that we know, must be regarded as having been produced from something else as its *causa efficiens*; but likewise it must be judged to have been produced by a cause which is purposive in its operation (*causa finalis*), i.e. it has arisen through ideal as well as natural causes. Nor can its purposive causality be explained through the analogy of art, for herein the cause of the parts is simply the artist's idea of the whole, whereas the parts of the organism are not related by an idea external to them, but rather the formative power is inherent in the organism itself (*es besitzt in sich bildende Kraft*).[4] "It organises itself . . . and its organised products in every species, no doubt after one general pattern, but yet with suitable deviations, which self-preservation demands according to circumstances."[5]

[1] As contrasted with *formal* purposiveness, e.g. of mathematical figures.

[2] It was this "outer purposiveness" that Kant had in mind when discussing the teleological argument in the first *Critique*. [3] § 64.

[4] § 65. Kant is here indebted to Blumenbach: *Über den Bildungstrieb*, 1781.

[5] *Ibid.* Kant's remarks here are in striking accordance with the biology of the nineteenth century, both as regards the organism's power of self-repair (cp. Driesch, etc.), and as regards the doctrine of progress by variation and modification.

Strictly speaking, Kant says, the organisation of nature has in it nothing analogous with any causality we know, but "we may approach nearer this inscrutable property if we regard it as an *analogon* of life"; not more than an *analogon*, since if the purposive causality be conceived as actually operative within the body (i.e. within matter) we are left with a hylozoism which is the "death of all natural science"; while, on the other hand, if we set it in an alien principle standing in communion with the body (or soul), the resulting supernaturalism is equally fatal to scientific inquiry. The *analogon* of life helps us, then, but little, and the only conclusion that remains to us is that "the concept of a thing as in itself a natural purpose is, therefore, no constitutive concept of understanding or of reason, but can serve as a regulative concept for the reflective judgment, to guide our investigation about objects of this kind by a distant analogy with our own causality according to purpose generally, and in our meditations upon their ultimate ground".[1] The teleological principle is, accordingly, a *maxim* from which he who studies organisms can as little free himself as from the universal physical proposition; for, as without the latter we should have no experience at all, so without the former we should have no guiding thread for the observation of a species of natural things which we have thought teleologically under the concept of natural purposes.[2] The question of the actual nature of the purposively operating forces is bound to be left quite open, for we cannot tell whether, in the unknown inner ground of nature, the physico-mechanical and the purposive combination may not be united in the same things in one principle.[3]

[1] § 65. [2] § 66.

[3] § 70, Ber. V. 388. Discussion has raged around the question whether Kant's position favours a thoroughgoing mechanism or a complete teleological system in the whole of nature. Ernst (*Kantstudien*, Erg. 14, p. 68) says: "The result of the *Krit. d. Urteilskraft* on the question to which principle Kant has given the precedence is a general *non liquet*." Pfannkuche (*Der Zweckbegriff bei Kant*, *Kantstudien*, Bd. V) sees the implication of a special teleological principle since inorganic nature is already explanied on mechanical grounds, and con-

Nothing but sheer dexterity avails to save Kant from the pressure which the problem of the living organism has brought to bear upon his whole *Weltanschauung*. In the *Critique of Pure Reason* there might have been no reality besides inanimate nature so far as his investigation had gone, and the understanding was its securely established lord. This restricted view of nature as a mechanical system is naturally predominant in the *Metaphysische Anfangsgründe der Naturwissenschaft* (1786), where nature is defined as "the sum-total of all things so far as they can be objects of our senses".[1] Yet in this same essay Kant takes the fact of *life* into consideration, and while maintaining that "all matter as such is lifeless (*leblos*)", he thinks that "if we seek the cause of a change of matter in life, we may have to seek it in another substance, different from matter, although combined with it".[2] Next comes the essay on *The Use of Teleological Principles in Philosophy* (1788), with its important assertion that since the organism, regarded as that in which everything is both means and end to everything else, cannot be explained by physico-mechanical laws, resort must be made to teleology, "for to abandon teleological grounds of explanation in order to make room for physical grounds in the case of organised beings as regards the preservation of their species

sequently the suggestion of following out the counter proposition of the antinomy eventually in the whole of nature (*Ur.* § 70), and again to "try the said maxim of Judgment in nature as a whole" (§ 75), can only mean a special kind of teleology. This inference is, however, specifically excluded by Kant's remark that such a maxim, though useful, is not indispensable, since nature as a whole is not given as organised (§ 75). Stadler (*Kant's Teleologie*) thinks that Kant's position may be interpreted as implying that teleology requires no special principle, but is explained as in the *Dialectic of Pure Reason* by theoretical reason; it is a principle which reason employs in its search for completeness. This involves that mechanism is universally operative, while teleology is merely a supplementary principle. Stadler's arguments are, however, influenced by the erroneous impression that the *Über Phil. überhaupt* (the original draft of the Introduction to the *Krit. d. Urteilskraft*, published by J. S. Beck in 1794), whose position was that theoretical reason is sufficient by itself to account for Teleology, represents Kant's later position. The fact is that it was actually written before the *Kritik der Urteilskraft* appeared. (See Erdmann, *Kant's Krit. d. Urteilskraft:* Einleitung.)

[1] Ber. IV. 467. [2] Ber. IV. 544.

is wholly unthinkable".[1] Here in the *Critique of Judgment* he moves in a wider nature, and is able to regard "ourselves as, in the widest sense, belonging to nature".[2] In this wider nature the category of causality is still constitutive, so he thinks, of all objects whatsoever; yet in regard to some objects (viz. organisms) the mechanical interpretation is not in itself adequate,[3] for an organism is not a whole in the sense of a mere sum of parts, as an object standing under mere mechanical laws is, but a whole which also determines its parts. Hence there arises the *Antinomie der Urtheilskraft.* The thesis maintains that all producing (*Erzeugung*) of material things must be *judged* to be possible according to merely mechanical laws. The antithesis affirms that some products (*Producte*) of material nature cannot be judged to be possible according to merely mechanical laws, *ihre Beurtheilung erfordert ein ganz anderes Gesetz der Causalität, nämlich, das der Endursachen.*[4] There is no actual contradiction here as there would be if the two propositions were "converted into constitutive principles of the possibility of objects". They cannot be so taken, because "Reason can prove neither the one nor the other of these fundamental propositions, since we can have *a priori* no determining principle of the possibility of things according to mere empirical laws of nature". What each principle offers is a rule for judging about (*beurtheilen*) organic bodies. Thus the thesis does not assert that all material things can arise only mechanically, but only that by our faculties mechanical causes of material phenomena are alone cognisable; and this makes it possible that the antithesis also may be true, for it must be observed that the proposition "mechanical causes of material phenomena are alone cognisable" affirms neither the mechanical origin of all bodies nor the possibility of knowing all mechanical objects. Accordingly, the antithesis maintains that there may be bodies, the mechanical origin of which is

[1] Ber. VIII. 169.
[2] § 65, Ber. V. 375.
[3] § 61.
[4] § 70, Ber. V. 387.

unknowable. We cannot say positively that an organism cannot be explicable in accordance with the mechanism of nature, yet we can and must say that so far as human reason (*mensliche Vernunft*) is concerned *we* cannot judge organisms to be explicable according to merely mechanical laws, and therefore we must reflect upon them in the light of the principle of final causes. Kant thus tries to preserve the universality of the principle of mechanical causality by affirming that the *Antinomie der Urteilskraft* is incident to the discursive understanding, and that for an intuitive understanding mechanism and teleology may be united.

What, now, is implied in this conception of an intuitive understanding? In 1770 Kant had argued that human intelligence is not archetypal but ectypal, and consequently intuition for us is possible only "in so far as anything affects our senses". Only in the case of God, whose intuition is the *principium* of objects, is a perfect intellectual intuition possible. This notion is carried forward into the critical philosophy. It is present by implication throughout the earlier sections of the *Critique of Pure Reason.* Moreover, the use of the categories is said to be confined to experience, because without receptivity, i.e. by means merely of intellectual intuition, no object can be given to us. In the second edition of the *Critique* it is expressly laid down that "had we an intellectual intuition, not only should we not need the categories, but with such a constitution of the understanding they would have absolutely no use".[1] In the later *Critiques* this notion of a non-sensuous intuition or intuitive understanding comes to have the significance of a divine mind.

The positing of such an intuition seemed to follow from a consideration of the contingent character of our sensuous intuition, because to assert that our cognition is limited and that its material is contingent is virtually to form the conception of an intelligence for whom cognition would not be

[1] At a later period, however (cp. *Über die Fortschritte der Met.*), this view was controverted.

limited and for whom the data of intuition would not be given contingent facts. For such an intuitive understanding the content of knowledge would be immediate, and the distinction between being and knowing would disappear.[1] In *our* sensibility something may be given of which we have no notion, and likewise in our understanding something may be thought which does not exist in intuition. Since our intuitions and notions do not coincide, we are constrained to connect them by an act of judgment. We subsume our intuitions under our notions. What cannot be thus synthetically conjoined remains for us unknowable. For an intuitive understanding, on the other hand, the heterogeneity of thought and intuition would no longer be present; all notions would be intuited objects.

For our discursive understanding, then, a *whole* is given only through the parts which constitute its elements or factors. In regard to material wholes, if their "coming to be" from the arrangement of the parts is clear, no special difficulty arises. But there are other wholes, namely organisms, which are incapable of being accounted for as mere mechanical aggregates. In respect of these the understanding is compelled to posit the *whole* as the producing principle of the parts. For the human discursive understanding this whole can never be a real whole, but only an *ideal* whole, that is to say, only the Idea of the whole. In other words, the human understanding must think the nature of a whole as the cause of the whole; it must conceive this cause as determined by the presentation of the effect, and consequently it judges the effect teleologically.

To an intuitive understanding, on the other hand, which would intuit the whole as prior to the parts, the whole would be a real whole from which the parts would necessarily proceed, just as according to mechanical laws the whole proceeds from the parts. For such an understanding the two modes of explanation, mechanical and teleological, would

[1] This, of course, is one of the foundation-stones of the Hegelian philosophy.

therefore fall together and be identical. It is only for a discursive understanding that they are distinct. Accordingly, if the conception of an intuitive understanding can be sustained, the notion of causality according to End or Purpose will be nothing more than a regulative notion for the reflective judgment.

Apart, however, from the question of the validity of this notion of an intuitive understanding, has Kant here quite forgotten that the discursive understanding is the lawgiver to phenomena and therefore to organisms? Throughout the entire discussion of organism teleology is virtually admitting that there are certain implicit ... in this science, to wit organisms, which temporarily ... 1770 Kant ... use the legislation of the understanding. But ... archetypal ... the human understanding is concerned, the organism ... ssible ... cannot be judged to be possible according to mere mechanical laws, i.e. as a mere interaction of parts, then the situation seems hopeless, for in the "unseen inner ground of nature", whatever may be the nature of the "one principle" which "unites physico-mechanical and purposive combination" ... it certainly cannot be any kind of mechanism.[1] It would appear, therefore, that, on Kant's premises at least,[2] the facts about the organism demand a special principle. An adequate account of an organism can never be rendered by means of mechanical laws unless the organism be regarded merely as the sum of its interacting parts. And he is quite clear that it cannot be so regarded: "for in this way emerges no concept of a whole as purpose,

[1] This marks an important change in Kant's view of Causality; see A. C. Ewing, *Kant's Treatment of Causality*, pp. 228–9.

[2] It is to be observed that Kant's treatment of the problem was not on all fours with contemporary discussion. "Mechanical" for Kant could obviously have no reference to elaborate engines, and if he could have taken such examples into account he would surely have seen that an engine cannot be contrasted, as a piece of mechanism, with an organism as a purposive phenomenon. In an engine the conception of purpose is presupposed; it is designed to work for an end. It has, in fact, been constructed by a mind, and is merely an elaborate extension of bodily organs. When Kant spoke of *der blinde Mechanismus der Natur* (*Ur.*, § 66) he meant causation by the interacting parts as contrasted with causation by the whole. Cp. Ewing, *Ibid.*, p. 229.

whose internal possibility presupposes, throughout, the Idea of a whole on which depend the constitution and mode of action of the parts, as we must represent to ourselves an organised body".[1] "Absolutely no human reason (in fact no finite reason like ours in quality, however much it may surpass it in degree) can hope to understand the production of even a blade of grass by mechanical causes."[2] But if so, surely the category of mechanical causality is thereby proved to be insufficient. What is it, then, that although Kant rejects, he holds that organic bodies, wholes which cannot be explained from the parts, are *given* in experience, he declines to allow that they demand a special principle? Why does he aver that we can describe the characteristic of self-organisation only as an *analogon* of life? I think the answer is because his epistemological inquiry in the first *Critique* was conducted within the limits of a very narrow "nature",[3] and the installation of the understanding as law-giver to nature with a view to our acquiring knowledge *a priori* resulted in banishing from nature all except the offspring from the union of the "bloodless categories" with the indeterminate manifold of intuition. As, in the course of his philosophical inquiry, he came to realise that nature could not be thus limited, he should have seen that the factors of life and the presence of new kinds of whole demanded another mode of treatment. Yet his only response to the changed situation was to accept organisms as empirical facts (thus abandoning the subjective view of knowledge), and to insist that *our understanding being what it is*, the only whole which can precede the parts (as in an organism) is an ideal whole. The *Vorstellung* of the whole is conceived to be the ground of the real whole. Nevertheless, he could not remain consistently true to this dichotomy of causes into mechanical causes (*causæ efficientes*) which are real, and purposive causes (*causæ finales*) which are only ideal. "We

[1] § 77. [2] *Ibid.*
[3] Even in the *Urteilskraft* nature is equated with matter; *vide* § 68.

are conscious", he says, "of the inadequacy or even unsuitability of our presentations for being causes of their objects."[1] The operative agent is in fact the will, "the faculty of acting in accordance with purposes".[2] Moreover, it is illegitimate to speak as Kant does of an actual impulse (*Trieb*), of even a selective impulse (*Bildungstrieb*) within the organism, if the causes are anything less than efficient causes actually operative in the realm of reality. It seems impossible to maintain at once that the objects of experience are rendered possible only through the application to sense-data of the categories, and that organisms are given in experience. If every object of experience must be subject to our *Erkenntnissvermögen* as those faculties are unfolded in the first *Critique*, if we can say nothing about the actual nature of anything which has not been constituted an object through these categories in conjunction with the sense manifold, then we cannot be said to know organisms, regarded as beings characterised by inner purposiveness, at all. But if it be admitted that there are given in experience organisms which cannot be judged to be possible according to mechanical laws—and Kant regards this as quite certain[3]—then it would appear that the *Erkenntnissvermögen* previously recognised have failed to prove their right to be regarded as sole legislators for the human understanding. Kant maintains that the peculiar causality displayed in organisms is strictly not analogous with any causality that we know. But there is something not far short of perversity in shutting one's eyes to the different kinds of causality here involved.

[1] *Urtheilskraft*. Einleitung III. Ber. V. 177. [2] § 64.

[3] Kant argues this more strongly in the essay *Über den Gebrauch teleologischer Principien in der Philosophie*, 1788, and still more so in his latest writing. See *Opus Postumum*, pp. 217–235, especially p. 225: Organisierte Körper (nicht bloss Materie) zeigen ein immaterielles Prinzip an, und insofern die Organisation durch alle Weltteile erstreckt ist und Körper umbildend und tote durch Ersetzung neuer Bildungen an die Stelle der gestorbenen darstellend, eine anima mundi; worunter man sich aber nicht gar ein denkendes Wesen (*spiritus*) vorstellen darf, sondern allenfalls nur anima bruta; denn ohne dies lässt sich die zweckmässige Erzeugung ich will nicht sagen: nicht erklären, sondern gar nicht denken.

No *analogon* of life is required for the interpretation of the organism; the organism is alive, and as such differs *toto cælo* from anything to be found in inanimate nature. By a process precisely similar to that by which he had shown the categories to be necessarily involved in factual succession in time it could be shown that for the interpretation of the data offered in organisms a principle of the relation of means and end is indispensable; that the concept of purpose is objectively valid. Instead of affirming that the impossibility of judging living things to be merely mechanical products of nature renders it necessary to adopt a concept of design as a mere maxim for the empirical use of our reason, he should have recognised that *at the level of living beings*[1] the teleological concept is a transcendental principle, a principle necessarily involved in each and every act of apprehending living organisms. The refusal to recognise the relation of means and end as a category is of course based upon the contention that it cannot be shown to be constitutive of objects of experience in general, that it is only a notion which we must perforce make use of in judging about (*beurtheilen*) certain objects. But if, as I have urged, the categories are principles involved in the interpretation of experience, ways of judging, i.e. of apprehending, then the distinction between a determining judgment in accordance with constitutive categories and a reflective judgment in accordance with regulative notions calls for rejection. And if certain facts of experience cannot be interpreted as due to mechanical laws, but require the concept of purpose or end, the teleological principle has equal claim with any other categories to be regarded as a transcendental principle, the only important difference between it and the categories recognised by Kant consisting in the greater universality of the latter.

[1] At the outset of his philosophical career (cp. *Naturgeschichte*) he recognised that the facts of the animate realm belong to an order different from those of the inanimate.

We have now to consider whether there is further involved in the conception of *Zweckmässigkeit* in nature the notion of an actually designing intelligence. Theism seeks to render conceivable the reality of purposive natural products through the principle of a supreme intelligence. And assuredly if we must necessarily think of organised beings as having been produced designedly, their dependence upon and origin from an intelligent being would seem to be clear. "Teleology would then find the consummation of its investigations only in theology." In the first *Critique* Kant had maintained that the highest formal unity to which Reason can attain is the purposive unity of things, and "the speculative interest of reason renders it necessary to regard all order in the world as if it sprang from the design of a supreme reason. Such a principle discloses to our reason, employed in the field of experience, altogether new prospects, enabling it to connect the things of the world in accordance with teleological laws, and thus to reach its highest systematic unity."[1] As I have noted, Kant's treatment of the physico-theological (or teleological) argument in the first *Critique* was wholly concerned with what he afterwards described as outer purposiveness of a material kind. The full extent of the problem was not then clear to him. From this restricted point of view the teleological argument seemed to be an attempt to prove an intelligent cause of the purposive arrangements everywhere manifest in the world and yet wholly foreign to the world. Kant first reduces the scope of this argument to a minimum by pointing out the illegitimacy of arguing from those instances of design with which we are acquainted—an infinitesimal part of the universe—to the existence of an intelligent author of the universe as a whole. The most that could be inferred would be the existence of a cause proportionate to those observed instances.[2]

From this restricted point of view he points out that the

[1] A 686 = B 714. Cp. *Proleg.*, § 57.
[2] A 627 = B 655. Cp. *Urtheilskraft*, § 85.

argument evidently rests upon the analogy of certain products of nature with works of human art. Not only is it a doubtful procedure to argue on the basis of the similarity of certain products of nature to houses, ships, and watches, that *Naturproducte* are likewise the work of understanding and will; but even if for a moment the analogy be allowed to stand, the purposiveness and harmony of nature would afford evidence only of the contingency of the form, not of the material or substance of the world. The utmost that could be established by such an argument would, therefore, be an architect of the world whose operations were greatly restricted by the nature of the given conditions, not a creator to whose conception (*Idee*) everything is due. To prove that matter itself is contingent we should have to show that the things and events of the world are in themselves incapable of this order, and that would be to fall back upon the cosmological argument.

Further, Kant argues, after the manner of Hume, that it is a perverted reason that takes the Idea of systematic unity, which was intended only as a regulative principle for discovering that unity, hypostatises it, determines it anthropomorphically, and adopts it as a principle of explanation. In doing so Reason deprives itself of its own aim. The regulative principle requires us to conceive such systematic unity as inherent in the very nature of things. But if we *begin* with a supreme ordaining being as the ground of all things instead of approaching by degrees to such a being, we are annulling the unity of nature as something foreign and accidental to the nature of things.[1]

When Kant wrote the *Kritik der Urteilskraft*, he was alive to the problem presented in the principle of "inner purposive-

[1] A 693 = B 721. So also in the *Kritik d. Urteilskraft*, § 68, it is maintained that it would not only be arguing in a circle to introduce into the context of natural science the conception of God to explain the purposiveness of nature, and then to use the purposiveness of nature to prove that there is a God, but also such a resort to God would lead no further in the direction of an explanation than the expression "purpose of nature".

ness". Accordingly he spent little time on the *analogon* of art with which his discussion of teleology in the first *Critique* was chiefly occupied, but passed at once to a consideration of what is involved in the inner purposiveness displayed in nature. He continues, however, to use arguments identical with those of the first *Critique* with no real recognition of the new difficulties presented in the facts of inner purposiveness. He repeats his contention that while we can form no conception of the possibility of such facts save by thinking a designedly working supreme cause thereof,[1] yet if the maxim of teleology be regarded as more than a methodological rule for the investigation of certain products of nature, if it be taken to represent an actual designer, the very purpose for which the rule was adopted, namely the progressive realisation of the systematic unity of nature, is defeated.

Side by side, however, with this estimate of the Idea of teleology stands the argument already noted—an argument which accords better with the general treatment of "inner purposiveness"—that since purposiveness is a notion which wholly transcends the notion of the mechanism of nature, the ground of that *Zweckmässigkeit* which the "reflective" judgment is compelled to recognise in nature can be sought only in a suprasensible basis of appearances. For the solution of the antinomy of the *Urteilskraft*, that is to say, appeal is once again made to a distinction between the phenomenal realm and the total world of intelligible reality. Kant was practically prevented by epistemological considerations from doing anything more positive than merely relegating the problem to the unknown realm of the suprasensible. He was prevented also from seeing that the essentially metaphysical question here involved is how we are to think of the nature of reality as a whole in order that room may be found for the fact of purposiveness. I shall presently have to urge that Kant's various references to the suprasensible realm leave us in entire bewilderment as to what we are to

[1] § 75.

understand thereby. Meanwhile, I note that all he has to offer positively in regard to the ground of the purposiveness displayed in nature consists of two assertions. The first is that already referred to, namely that by our present faculties we can do no more than think of a supreme intelligence or intuitive understanding which, unlike our discursive understanding, creates its own objects. But as already pointed out, if the suggestion of an intuitive understanding had been taken seriously, it would have meant the abandonment of the critical position. And not only so; the conception of an intuitive understanding is of no special service in the realm of organisms. If it must be admitted there, its operation is no less required in the realm of physical nature, for the manner in which the sense-data originate is just as inexplicable as the manner in which organisms are produced. In truth the notion of an intuitive understanding is as unserviceable in the one case as in the other.

Kant's second contention is that physical teleology would not of itself suffice to establish the belief in divine agency. It would appear to lead equally to a *Demonology*.[1] It is only when we set before ourselves a final purpose which is consistent with the moral law that we can legitimately assume a moral world-cause. And further, there is no pathway to knowledge of the suprasensible realm except in the moral realm. "The ground of the failure of the attempt to prove God and immortality by the merely theoretical path lies in this, that no knowledge whatever is possible of the suprasensible in this way (of natural concepts). On the other hand, the ground of its success by the moral way (of the concept of freedom) is as follows: here the suprasensible (freedom), which in this case is fundamental, by a determinate law of causality that springs from it, not only supplies material for cognition of other suprasensibles (the moral final purpose and the conditions of its attainability), but also establishes its reality in actions as a fact, though at the

[1] § 86.

same time it can furnish a valid ground of proof in no other than a practical point of view (the only one, however, of which Religion has need)."[1]

There is only one of the Ideas of pure reason "whose object is a matter of fact and one to be reckoned among the *scibilia*",[2] viz. the concept of freedom; and this concept alone "can extend reason beyond those bounds within which every *Naturbegriff* must remain hopelessly limited".

With the real issue in the teleological problem Kant then scarcely came to grips, although his general view of the problem strongly resembles that of Hume. In the *Dialogues concerning Natural Religion*,[3] Cleanthes, who sees in the universe "nothing but one great machine subdivided into an infinite number of lesser machines", argues that the universal adaptation of means to ends warrants the inference to an intelligent author. Philo in response points out the illegitimacy of transferring to the whole any conclusion about the parts of the universe. We have seen ships and cities arise from human art, but, he argues, we have no experience of the origin of a universe, and we cannot pretend to find any similarity between the erection of a house and the generation of a universe. He proceeds to urge that there is no more difficulty in conceiving that the various objects fall into order and arrangement through means of an unknown cause inherent in them than in conceiving that arrangement to be due to an equally inscrutable source of order among the ideas in an infinite mind. For if it be said that the ideas which compose the reason of the supreme being fall into order of themselves and by their own nature, why may it not equally be said that the parts of the material world fall into order of themselves and by their own nature?[4] All instances of generation and vegetation are cases of matter falling into order without any known cause. And Philo maintains that in so far as the

§ 91. [1] *Ibid.*, Ber. V. 468. Cp. *Kritik d. prakt. Vernunft*, Ber. V.
[3] Second Edition, p. 44 ff. [4] *Ibid.*, p.

universe bears a greater likeness to organisms than to products of human art, it might be more reasonable to ascribe its origin to generation or vegetation than to reason or design.

Both Hume and Kant conceive the possibility of regarding the universe as possessing the essential characteristic of the organism, namely the quality of self-regulation. As such it is not to be explained, on the analogy of art, as a product due to an antecedent cause in the artist's mind. Its *nisus formativus* is inherent in itself. But when it is asked what is therein implied, neither Hume nor Kant is clear. Hume was content to point out[1] that there may probably be a vast number of principles co-ordinate with the principles of reason, instinct, generation, and vegetation, any one of which might furnish a theory of the origin of the world. Kant can only point to the *analogon* of life in explanation of the principle of self-organisation and allow that a concept of purpose or end has its use as a mere regulative maxim.

The real question is, however, whether the positing of the organising factor in the object renders the concept of purpose or end otiose and unnecessary. Hume was of the opinion that to install the organising factor in the object implied the destruction of the teleological argument. Kant, in the earlier stages of his thinking, was of the opposite conviction. In the *Allgemeine Naturgeschichte* he described the crude unformed matter or raw material out of which the universe gradually evolved as possessing originally a "tendency to fashion itself by a natural evolution into a most perfect constitution". Under the domination of the forces of attraction and repulsion, the universal movement, after many disturbances and much conflict, settled down to a vast circular movement within which the elements grouped themselves into smaller planetary systems. And the same process multiplied to infinity presents us with an orderly evolved universe. But, Kant asks, "how would it be at all possible that things of such diverse nature should tend in combination with each

[1] *Dialogues*, pp. 135 ff.

other to bring about harmonies and beauties so admirable and even to subserve such ends of things as are found in some respects outside the sphere of dead matter (as in being useful to men and animals) unless they acknowledged a common origin, namely an infinite Intelligence, an Understanding in which the essential properties of all things have been relatively designed?" And, he concludes, "there is a God just because nature even in chaos cannot proceed otherwise than regularly and according to order".

Whether or not the inference to an infinite Intelligence is as clear as Kant in 1755 was disposed to think, it may at least be maintained that the appeal to mechanically operative law in support of a non-teleological interpretation of the universe is singularly inept. Hume argues that to repose in the idea of an organising intelligence has little more to commend it than the resort to an inscrutable principle of vegetation or generation. But in either case the order of the world is presumed to be due to the operation of *some* principle, and by principle Hume certainly meant a regularly operative law. Accordingly, the teleological character of the thing (or universe) would appear to remain, for to say that the mechanism of order and arrangement is inherent in the object (or universe) is merely to say that the object (or universe) is teleological. One of Hume's central contentions in the *Dialogues* is that we can draw safe inferences only when we are moving within the realm of actual experience. But on the ground of what is known of purely mechanical contrivances, we are safe in concluding that the more elaborate the machine the more apparent is its teleological character. The obvious fact about a machine is that it has been constructed with an end in view. It is only when the mechanic is left out of consideration that the machine can be conceived as anything but a highly teleological system.[1]

[1] Dr. Broad argues that the proper complement to a completely mechanistic theory about organisms is some form of Deism. (*Mind and Its Place in Nature*, pp.

The machine loudly proclaims its designer. There has been a deliberate arrangement of the parts with a view to the accomplishment of an end. It is part and parcel of a mechanistic theory that the behaviour of a system must be due to the initial configuration of parts. But matter as the physicist knows it has no natural tendency to arrange itself in the form of machines. Consequently, if the biological mechanist is in earnest about the analogy of organisms to artificial machines, he is driven, as Broad urges, to postulate, at the point where natural machines (i.e. organisms) arose from matter, the intervention of a mind which deliberately arranges non-living matter in the form of a natural machine.

On the other hand, the attempt to install the designer within the machine and call it an entelechy or soul can scarcely be regarded as successful, for in the first place the designing entelechy cannot be identified with the mind that animates the organism, unless indeed it be supposed to have "performed as an embryo a feat which it is totally incapable of performing in its developed state".[1] And if, alternatively, the entelechy be conceived to act in a manner different from the way in which our own minds act when designing, we are simply explaining the obscure by the more obscure. The more reasonable view would appear to be that while all the physical components of the organism act in strict conformity to mechanical laws, the origin of that specific structure which fits it to behave purposively demands a special teleological principle.[2]

Before asking exactly what such teleology implies, we may turn to a wider aspect of the problem.

Kant, who had a quite definite conception of evolution in

[1] Broad, *op. cit.*, p. 84.

[2] Biological organisation, L. J. Henderson maintains, is teleological and non-mechanical in the sense that it consists in a teleological and non-mechanical relationship between mechanical things and processes, the relationship being rational and non-mechanical, the things related mechanical and non-rational. (*Order of Nature*, p. 205.)

general,[1] was obviously unable to contemplate the problem of teleology in connection with the evolution of organic forms. It is, however, in relation to that phylogenetic process that the problem of teleology becomes urgent. Few would care to follow the writers of the *Bridgewater Treatises* in basing a theistic argument solely on the purposiveness displayed in organs and organisms. The progressive specialisation, say, of those perfect tactual organs the *vibrissæ* of the cat out of the common mammalian hairs, or of the snake's venom-tooth from the dentition of the other members of the order to which they belong, renders but little assistance to a concept of divine guidance. Yet when we contemplate an infinitely slow series of minute adjustments by which organic life has been projected along its evolutionary path, the question of directive agency can scarcely be left out of account. If evolution means anything more than continuity, its general progressiveness (notwithstanding incidental retrogressions) is the story of the attainment of new units with characteristics qualitatively different from the preceding units. The new qualities or emergents, though products of *schöpferische Synthese*, to use Wundt's term, have not themselves in any real sense evolved. They are supervenient, as Lloyd Morgan says, upon a changing material. Thus, on the basis of a physical organisation, there is further organised a variety of physiological forms; and again on the basis of the physiological there is further organised a mental life. The new qualities cannot be explained from the preceding organisation; they simply emerge when the conditions for their emergence are ready. "Out of certain physiological conditions nature has framed a new quality, Mind, which is not in itself physiological, though it lives and moves and has its being in physiological conditions."[2] "Out of three sounds" is framed "not a fourth sound, but a star".

[1] Cp. *Muthmasslicher Anfang der Menschengeschichte*, Ber. VIII, 107; Hart., IV. 313 ff. *Recension von Herder's Ideen, u.s.w.*, Ber. VIII., 62; Hart., IV. 188. *Urtheilskraft*, § 80, *Über den Gemeinspruch: Das mag in der Theorie richtig sein, u.s.w.*, Ber. VIII. 307; Hart., VI. 341. Cp. Dieterich, *Kant und Rousseau*, 1879, S. 26 ff.

[2] Alexander, *Space, Time, and Deity*, II. 8.

These emergents, which make their appearance at appropriate stages in the evolutionary process, are capable of being arranged in hierarchical order, in other words they point to a progressive realisation of higher and yet higher values. Below the human level, at all events, these subsistent values obviously could not be efficient agents bringing about their own realisation in the region of concrete fact. "Life", says Bernardino Varisco, "*develops itself* according to laws absolutely irreducible to laws either physical or physiological, because life in developing itself tends towards an end which is not in the consciousness of any one individual subject, but which goes on realising itself by means of the conscious aims of the individual subjects. . . . The animal tends towards its improvement. It may attain it or not, but in trying to do so it co-operates, without knowing it, to develop life, to increase its value—that is, to render possible, to other animals which come after, the realisation of higher values".[1]

Now it seems excessively difficult to regard this process of the progressive attainment of new values otherwise than as directed by some kind of intelligence. Within the separate branches of science doubtless the qualities of matter, life, mind, and so forth may be accepted *simpliciter* and examined for what they are, but a metaphysics which, as Bradley says,[2] must take account of all sides of our being cannot refrain from framing a concept adequate to cover the wider teleology thus presented. The framing of such a concept does not for a moment mean casting off from the safe moorings of fact and essaying a fathomless ocean of speculative mystery. The concept will be formed, as every other concept is, under the constraint of empirical fact. And the only concept we have is that of intelligent purpose, unless, indeed, we are prepared to maintain that a blindly working mechanical universe makes its own elaborate preparations for the successive advent of visitors, of whose

[1] *The Great Problems*, Eng. trans., 1914, p. 151.
[2] *Appearance and Reality*, p. 146.

existence, still less requirements, it is blissfully unconscious, and who, when pressed, can give no account of their parentage or the purpose of their coming—this would surely be vitalism *in extremis*. Equally irrational is the view that takes such values to be mere projections of our own reason. In no sense does reason *make* them, it simply discovers them. At the very least there must be present something that is capable of evoking the value-judgment. "You do not make things by valuing them any more than you make the ground by walking on it; there must, therefore, be something in the character of the object which goes to determine the value we find in it."[1]

It must be admitted that further to characterise the underlying ground of the *zweckmässige Anordnung* of the entire cosmic process presents almost insuperable difficulties. Any notion we may form of the whole must needs be fashioned from our knowledge of the character of the parts, and as both Hume and Kant insist, the infinite dissimilarity between the relation of part to parts and the relation of parts to whole renders even an analogical argument precariously weak.[2] At the same time, neither of these thinkers denied the force of the *argumentum ex analogia hominis*. Both, indeed, plainly indicate,[3] after the manner of Bishop Butler, that although metaphysical judgments of this kind must always fall short of *a priori* certainty, and any predicates which we assign to the ultimate ground of things must necessarily be tinged with anthropomorphism, yet this limitation is one to which all our knowledge, save the most formal deductive sciences, is subject. At the same time, the concept that is indicated by the teleological character of the phenomenal

[1] George Galloway, Art. "Evolution and Finality," *Hibbert Journal*, April

[2] This dissimilarity is, however, minimised when it is recognised that a system is a part from one viewpoint and simultaneously a whole from a different viewpoint.

[3] *Vide* Hume, *Dialogues*, Part XII; Kant, *Prolegomena*, § 57, *Dialektic*, Ber. III. 457 ff.; and cp. Martineau, *A*

A. J.

world is not that of a deity standing as it were outside the universe in the relation of designer to machine. The essential feature of organic being as contrasted with products of human design is that the organism contains within itself the principle of organisation, and that the constitution and mode of action of the parts depend upon and presuppose the whole. If therefore we pursue the analogy of the organism, we shall think of God as the whole universe, known and unknown, as *uniquely organised.* At the outset, however, we must qualify the analogy. Finite organisms live and move in a wider environment. Reciprocal relations with other factors and other organisms are involved. But it is evident that the whole universe cannot be organic in this same sense. There can be no external relations in an independent whole. The universe as a whole, if a developing universe, depends for its development upon nothing outside itself. The phenomenal universe, the universe as apprehended by us, is in a condition of continuous passage into novel forms of organisation, and the inherent form of organisation, to which its teleological character points—the ordering principle bringing ever-new variety of form and ever-increasing value—is the one systematic whole which we may call God.[1] The God indicated by the teleology of the world is thus *omnitudo realitas* in a special sense. It is not to be conceived as the aggregate of the parts of the universe any more than an organism can be conceived as the sum of its parts. Nor is God simply an arbitrary terminus in a regress which in

[1] In Whitehead's language God is the principle of concretion, the principle of determination or ordering activity, the antecedent ground conditioning every creative act. I think, however, that Whitehead's treatment of the problem is vitiated by his unsatisfactory doctrine of indeterminate creativity. While holding that the order of the world is derived from the immanence of God, Whitehead thinks we are precluded by the fact of evil, which is the enemy of concretion, from conceiving God as the "foundation of the metaphysical system". Whitehead therefore postulates outside God the factor of indeterminate creativity. But how a creativity conceived as a blind force—a mere pushing without guidance or direction—can be credited with producing nature's prolific variety is not clear. Moreover, the evil in the world cannot be attributed dogmatically to whomsoever is creating the enduring objects of the world.

reality is infinite. God is the whole, and the concept of whole is one which we are bound to employ in dealing with the parts of the universe. God is the unique whole or ultimate being, in which everything else finds its final explanation. God is the ultimate *principium*, the ultimate ground of the principles of generation, reason, and whatever other principles are found to be involved in the phenomenal world. God is not the logical ground, of which the parts of the universe are deducible as consequents after the manner of the properties of a geometrical figure, but rather the real-ground in which the parts—the "infinite number of lesser machines" —find their place as relatively independent organisations.

CHAPTER IX

THE FACTS OF THE MORAL LIFE

KANT had emphatically denied that the system of experience is a closed system. The polemical use of reason, as he called it, consists in the defence of its principles against *dogmatic* negations of them.[1] So long as no attempt is made to bring *noumena* into the sphere of the phenomenal, and so long as the cardinal principles of reason do not involve us in contradiction, they cannot be denied, for the denial would in its turn involve synthetic judgments about that which lies beyond all possible experience. "We may safely accept those principles which are so perfectly consistent with the speculative interest of our reason in its empirical use, and are, moreover, the only means of reconciling that use with the practical interests of reason."[2]

The practical philosophy which is worked out in characteristically laborious fashion in Kant's ethical writings[3] is adumbrated in the first *Critique*. The question involved in the third antinomy is as to whether freedom is possible, and, if so, whether it can exist together with the universality of the natural law of causality. The *Transcendental Analytic* established the fact of the unbroken causal connection of all events in the world of sense; can any place then be found for freedom?

I have already pointed out[4] that in the later sections of the treatment of the third antinomy Kant found that the antinomy could be solved only by reference to a distinction between phenomenal causation and noumenal ground. If appearances (*Erscheinungen*) be taken as things in themselves, freedom cannot be saved; but if *Erscheinungen* be taken for what in reality they are, namely *blosse Vorstellungen* connected

[1] *Methodenlehre*, A 739 = B 767. [2] A 742 = B 770.

[3] *Fundamental Principles of the Metaphysics of Morals*, 1785; *Critique of Practical Reason*, 1788; *Metaphysical Principles of Morals*, 1797.

[4] *Vide supra*, p. 135 ff.

with one another in accordance with empirical laws, they must themselves have *Gründe*, which are not *Erscheinungen*. Thus room is left for an intelligible cause (*Ursache*), which, together with its causality, lies outside the empirical series, although its effects fall within the series of empirical conditions. Such a cause, being outside the time series, does not necessarily require a prior cause, and the effect may, with reference to its intelligible cause, be considered as free, and yet at the same time, with reference to appearances, as resulting from them according to the necessity of nature.[1] Every self-conscious individual has a twofold character, namely its character as an *Erscheinung* and as a *Ding-an-sich*. As possessing an empirical character its acts stand with other *Erscheinungen* in an unbroken causal connection, and form with the latter a single series in the order of nature. As possessing an intelligible character it becomes the cause of the same acts as *Erscheinungen*, but is not itself subject to any conditions of sensibility, and is not itself *Erscheinung*. The intelligible character can never, it is true, be known immediately, but it must nevertheless be conceived, for we must always admit in thought a "transcendental object"[2] as the ground of appearances. In its intelligible character the self-conscious subject must, then, be considered as free from all influence of sensibility and from all determination through *Erscheinungen*; free in its acts from all natural necessity. In this way freedom and nature, each in its complete signification, may exist together and without conflict in the same action, according as we refer it to its intelligible or to its sensible cause. Man is partly a phenomenon, and as such he forms part of the system of nature. But man also knows himself through pure apperception,[3] and knows himself to possess the faculties of understanding and

[1] A 537 = B 565.

[2] This use of the term as practically equivalent to thing-in-itself is at variance with the more restricted sense in which the term is used in the later stages of the deduction of the categories.

[3] A 546 = B 574. This also is inconsistent with the critical position.

reason. The latter faculty is distinct from all empirically conditioned faculties, and, as the "ought" of the moral imperative shows, possesses a causality of its own. The "ought" expresses a kind of necessity and connection with grounds which we nowhere find in the realm of nature, and while moral action must be possible under natural conditions, those natural conditions do not determine the will, but only the phenomenal effects. "Reason frames for itself (*macht sich*) with perfect spontaneity an order of its own according to Ideas, to which it adapts the empirical conditions, and according to which it declares actions to be necessary even though they have not yet taken place, and perhaps never will take place. Yet it presupposes that reason can have causality with respect to those actions, for otherwise no empirical effects could be expected from those Ideas."[1]

All empirical effects are of course traceable to antecedent empirical causes, and consequently a man's acts, so far as they are phenomenal, are determined according to the order of nature, and Kant thought that if we could fully scrutinise all the *Erscheinungen* of a man's will, there would not be one single human action which could not with certainty be predicted and shown to follow with necessity from its preceding condition. There is, therefore, no possibility of the intelligible character originating a series of empirical effects at a given point in time,[2] for all such effects must have their antecedent phenomenal causes. Freedom is rendered possible only if the empirical character *as a whole* is determined by the intelligible character as its timeless ground. Reason is the unconditioned condition (*unbedingte Bedingung*) of the empirical series, the constant (*beharrliche*) condition of all free actions, and as such it lies outside the

[1] A 548 = B 576.

[2] Here, as in the *Nova Dilucidatio*, Kant is emphatic that an act of free will must have a determining ground, though independent of empirical determination. In this way he avoids making free action the sort of new beginning which in the third antinomy had been shown to be impossible.

phenomenal series; in it, even in reference to its causality, there is no succession of time, and the dynamical law which determines the succession of time in accordance with rules cannot be applied to it.

To summarise Kant's demonstration of freedom as a transcendental Idea[1]: The law of causality is valid for all empirical events. Carry the series back as far as we may, we can never arrive at a first cause, nor may we bring our quest to an arbitrary termination in a spurious *Schlechthin-Unbedingte*.[2] Nevertheless, room must be made for freedom, which in the first *Critique* is admitted as a possibility and in the second is recognised as a fact. The co-existence of freedom and necessity in one and the same action is rendered possible through the distinction between phenomena and their noumenal grounds. Phenomena have their ground (*Grund*) in the non-phenomenal sphere, and this intelligible cause (*Ursache*)[3] with its causality is outside the series, though its effects are to be found in the series of empirical conditions.

If we ask how, precisely, the intelligible world is related to the empirical series, we are without any clear answer. The discussion of the Unconditioned has so far familiarised us with a conception of a noumenal realm underlying the series as a whole. But the relation of any particular series of acts on the part of a finite individual to the "intelligible character" is left in complete obscurity.[4] Cohen's interpretation of the thing-in-itself as not something lying outside of experience, but rather a problem or task, involves the rejection of the view that by "intelligible character"

[1] I.e., "that nature does not contradict the causality of freedom". Kant points out that neither the reality nor even the possibility of freedom could be proved from mere concepts. A 558 = B 585.

[2] Cp. the *responsio* of the *Nova Dilucidatio*, *vide supra*, pp. 58-9.

[3] Kant was notoriously careless in his use of the terms *Ursache* and *Grund*, but without doubt he is here thinking of the noumenal sphere as the realm of dynamic causality—*Realgründe* in the sense in which he first used the term.

[4] The question why the intelligible character should give these particular phenomena is said to transcend all the powers of our reason. A 557 = B 585.

Kant meant something in which the empirical character is grounded, and whose nature is presented in the *Erscheinungen*. Cohen maintains that the intelligible character is the *ideal* which is traced out in the empirical character. Consequently transcendental freedom is not a suprasensible cause, but rather an end, "*Das moralische Wesen sei niemals bloss Mittel, sondern immer zugleich Zweck*".[1] Without doubt some of Kant's chief difficulties—especially that of reconciling the timeless existence of things in themselves with moral development—would disappear could we accept Cohen's interpretation; but it is equally certain that it cannot be regarded as Kant's position without doing great violence to the text. Numbers of references might be cited in which Kant declares that the intelligible character is revealed in the empirical, and that the empirical is in its turn determined in the intelligible character,[2] and in which he describes the intelligible character as the transcendental cause of the empirical.[3] In both the first and second *Critiques*[4] the intelligible character is described as that which lies at the basis of appearances and remains unknown only on account of the deficiency of our knowing faculties. To be sure Kant speaks of positive freedom as a determination of the will through the autonomous moral law, and on this view "the suprasensible nature of rational beings is their existence according to laws which are independent of every empirical condition, and therefore belong to the autonomy of pure reason".[5] Consequently, the moral law is the fundamental principle of a suprasensible nature and of a pure world of understanding. Thus it can give to the world of sense or the sensible system of nature the form of a world of understanding or a suprasensible system of nature.[6]

We cannot, however, accept these incidental remarks as decisive in regard to Kant's position, in the face of the

[1] *Begründung der Ethik*, S. 233.
[2] Ber. III. 366, 375, etc.
[3] *Vide supra*, p. 172, and cp. Ber. III. 370.
[4] First *Critique*, *passim.*, *Prac. Reason*, Ber. V. 99.
[5] Ber. V. 43.
[6] Ber. V. 70.

wealth of evidence supporting the contrary view. The probability is that with the facility with which he spoke of the world of appearances as at once appearances of the intelligible world and actually existing over against the intelligible world, he is here loosely speaking of the intelligible world, regarded as the morally ideal world, as if it were actually complete in a suprasensible realm, and at the same time as the terminus or goal of moral effort. We look in vain for any clear guidance as to the true character of the intelligible world. What Kant says about it only deepens the confusion, as, for example, when he refers to life after death as at once free from the limits imposed by the forms of intuition, and therefore timeless, and at the same time affording the possibility of progress in moral development.

The possibility of morality, then, according to Kant, rests upon man's independence, as *homo noumenon*, of determination according to natural laws, whether physical or psychological. And the formal rational condition of the use of our freedom is the moral law. The sense of moral obligation is the ultimate fact upon which the metaphysic of morals is to be constructed. Having its basis in the self-as-reason, the moral imperative is in the moral life what causality is in the phenomenal realm. The moral law is valid *a priori* for every rational being. Unlike the pure concepts of the understanding, which are "empty" except in relation to concrete experience, the moral law issues its categorical commands in the *mundus intelligibilis*, and demonstrates its superiority to the impulses of sensibility.[1]

The answer to the question: What ought I to do? may be said to be: Do that which will render thee worthy of happiness. But can we say that worthiness to be happy entitles a man to hope thereby to gain happiness? In the first *Critique* Kant supplies two answers. In the first place he falls back upon the argument (worked out in the *Vorlesungen über Metaphysik*) that reason in its theoretical

[1] Ber. V. 75. Cp. III. 524.

use must necessarily assume that "everyone has cause to hope for happiness in the degree in which he has by his conduct rendered himself worthy of it",[1] for otherwise the moral laws would be as an empty cobweb of the brain (*als leere Hirngespinste*). From this eudæmonistic standpoint, in accordance with which the validity of the moral code depends upon the metaphysical presupposition of the possibility of attaining the happiness merited by conduct, the existence of God is postulated in order to secure the ultimate coincidence of merit and happiness.

The second and more profound line of consideration proceeds from the conception of a "systematic unity of a moral kind". Since reason compels that moral actions should take place, it must be possible for them to take place. "I call the world a *moral* world in so far as it may be in accordance with all moral laws—which by virtue of the *freedom* of rational beings it *can* be, and in accordance with the necessary laws of morality it *ought* to be."[2] This world must, however, be conceived as only an intelligible world, inasmuch as abstraction has been made of all actual conditions (ends) and of all impediments to morality (weakness and depravity). It has objective reality, therefore, "not as referring to an object of intelligible intuition (for we cannot conceive an object of that kind), but to the sense-world, regarded, however, as an object of pure reason in its practical use, and as *corpus mysticum* of rational beings in it, in so far as the free will of the individual is placed, under moral laws, in complete systematic unity both with itself and with the freedom of others". In a moral world thus conceived, all actions would be such as though they sprang from a supreme will comprehending within itself all individual wills, and further, virtue and happiness would coincide. If ethics demands such a unity of ends, such unity must be possible, and thus the conception of a systematic unity of ends passes from the sphere of ethics into that

[1] A 809 = B 835. [2] Ber. III. 524.

of natural theology. The world of sense gives us no hint of a systematic unity of ends; that unity must, therefore, be sought in an intelligible world. Its reality can be based on nothing but the hypothesis of a supreme original good.[1]

This argument is more fully elaborated in that section of the second *Critique* called the *Dialectic of Pure Practical Reason*. The union of virtue and happiness, which is still held to be the *summum bonum*, is now declared to be the *Object* of the moral will, or of pure practical reason.[2] It is not to be thought of as the object of individual desire; morality is "not a doctrine of happiness".[3] It is not the demand for happiness but the moral law that moves the will to strive for the highest good.[4] All action of real moral worth has its spring in reverence for the moral law quite apart from any consideration of results. Yet the moral law, formal as it is, presupposes a moral order, the possibility of the realisation of which is a *sine qua non* of the moral life, for, Kant argues, if the latter were for ever unattainable, the moral life would be impossible. It is from this point of view that he is able to regard the realisation of the *summum bonum* as the object or end of moral action.[5]

The Antinomy of practical reason exhibits a conflict between the demand for the *summum bonum* as the necessary object of the moral will on the one hand, and the fact that "we cannot expect in the world by the most punctilious observance of the moral laws any necessary connection of happiness with virtue, adequate to the *summum bonum*"[6] on the other hand. The critical solution is that whilst it is false to say that virtue causes happiness, so long as virtue is being regarded as a form of causality in the sensible world, yet "since I am not only justified in thinking that I exist

[1] Ber. III. 528.
[2] Ber. V. 115, 129, etc.
[3] Ber. V. 130.
[4] Ber. V. 122.
[5] This point is further amplified (but without the addition of anything specifically new) in the essay *Ueber den Gemeinspruch: Das mag in der Theorie richtig sein, taugt aber nicht für die Praxis*, 1793 (Ber. VIII. 273 ff.), where Kant replies to certain objections raised by Garve against his view of the unconditional observance of the moral law.
[6] Ber. V. 113.

also as a *noumenon* in a world of the understanding, but even have in the moral law a purely intellectual determining principle of my causality (in the sensible world), it is not impossible that morality of mind (*Gesinnung*) should have a connection as cause with happiness as an effect in the sensible world, if not immediate, yet mediate (viz. through an intelligent author of nature), and moreover necessary".[1] It might appear from this passage that Kant conceived of the possibility of the union of happiness and virtue as explicable within the sensible world. Indeed, many passages could be cited in support of such an interpretation, especially the passages in which the *summum bonum* is described as "the harmony of the laws of nature with those of freedom".[2] But the general trend of his reflexion is to the effect that the connection between virtue and happiness must be attained in the intelligible world. Accordingly he lays down as the postulates of practical reason: (*a*) immortality, as furnishing the possibility of the attainment of the ideal by the moral personality, (*b*) freedom, as underlying the necessary supposition of independence of the sensible world and the faculty of determining one's will according to the law of an intelligible world, and (*c*) the existence of God, as the necessary condition of the existence of the *summum bonum* in such an intelligible world.[3]

The moral argument for the being of God is summed up thus: "The *summum bonum* is possible in the world only on the supposition of a highest cause of nature, having a causality corresponding to moral character. Now a being which is capable of acting in accordance with the idea of law is an *intelligence* (a rational being), and the causality of such a being according to this idea of law is his *will*. Consequently, the supreme cause of nature, inasmuch as it must be presupposed as a condition of the *summum bonum*, is a being that, through intelligence and will, is the cause

[1] Ber. V. 115. [2] *Ibid.*, 144, *et passim.*
[3] *Dialectic of Pure Practical Reason*, sects. V–VI.

of nature, and consequently its author, i.e. *God*. It follows that the postulate of the possibility of the *highest derived good* (the best world) is likewise the postulate of the reality of a *highest original good*, i.e. the existence of God. It has been seen to be a duty for us to promote the *summum bonum*; consequently it is not merely legitimate, but it is of necessity connected with duty as a need, that we should presuppose the possibility of this *summum bonum*, and since this is possible only under the condition of the existence of God, it inseparably connects the presupposition of this with duty, i.e. it is morally necessary to assume the existence of God."[1]

Practical reason by no means enables us to transcend the empirical conditions of knowledge and to attain to a knowledge of God in the strict sense. Nor must we presume to use the conception of an ultimate being for the purpose of deducing the moral laws, for it was from the inherent practical necessity of those very laws that we were led to the hypothesis of an independent cause or of a wise ruler of the universe, who gives effect to them. So, Kant concludes, "moral theology is only of an immanent use, teaching us to fulfil our destiny here in the world by adapting ourselves to the general system of ends, and not fanatically or wantonly to abandon the guidance given to us by a morally legislative reason for the moral conduct of life, in order to connect it immediately with the Idea of a supreme being. For this would be a transcendent use of moral theology, and, like the transcendental use of mere speculation, must inevitably pervert and frustrate the ultimate ends of reason." Kant had made the transition from the moral law to the lawgiver very hesitatingly.[2] The only real moral motive, he had maintained, is respect for the moral law itself, and this feeling of reverence is directed to no object except on

[1] *Ber. V.* 125. Kant was not oblivious to the critical objection to the view that God is the cause of the accomplishment of the *summum bonum*. "Reason", he says, "cannot decide objectively in what way we are to conceive the possibility of establishing the *summum bonum*." Ber. V. 145.

[2] In the *Religion*, however, it is taken for granted.

the ground of such law.[1] He observes, it is true, that "respect applies always to persons and not to things", but he makes it clear that the respect we show toward a person is, "properly speaking, respect to the law which his conduct exhibits". God himself is declared to be holy on the ground of the coincidence of his will with the pure moral law. The moral law, that is to say, owes its validity not to an arbitrary act of volition on the part of God, but to its own content.[2] The existence of God is not presupposed as the basis of obligation, for the sense of obligation itself rests on the autonomy of reason.[3]

Kant's way of stating the nature of the inference from the primary fact of moral obligation to the Idea of God is extremely unsatisfactory. In the first place he tried to establish a metaphysic of morals by making a division within the realm of thought, and attempting to prove in a "practical respect" what is indemonstrable theoretically. In the essay *Von einem neuerdings erhobenen vornehmen Ton in der Philosophie* (1796),[4] he had argued that for theoretical knowledge the Idea of God could be only a very general notion of *Inbegriff*. Or, if we are obliged to assume an understanding to account for the purposiveness in the world, the nature of such supreme understanding and its relation to empirical reality lies quite beyond the sphere of theoretical knowledge, and can be conceived only in a practical respect, i.e. in accordance with what is implied in the demands of the moral life. All his later jottings (*Opus Postumum*) show a distinct hardening of the distinction between theoretical knowledge and practical belief, and there are many passages in which he declares that from the point of view of strict transcendental philosophy (as concerned with the conditions and limits of theoretical knowledge and its *a priori*

[1] Ber. V. 78.

[2] The moral law may be taken as the command of God only in the sense that for God that law is not a dictate of duty, but a law of holiness. Cp. *Opus Postumum*, Konv. VII, Reicke XXI. 577, and Konv. I, Reicke 414, etc.

[3] Ber. V. 125.

[4] Ber. VIII. 387 ff.

concepts and Ideas) the nature of God is inscrutable, while in the realm of morality (or what is in the *Opus Postumum* called the metaphysical realm) through the categorical imperative the nature of God is revealed,[1] and his reality is the essential presupposition of the moral life.[2] In the second *Critique* he had tried resolutely to maintain, consistently with the theoretical philosophy, that the moral argument bestows upon the concept of God increased validity. "A want or requirement of pure reason in its speculative use leads only to a hypothesis, but that of pure practical reason to a postulate."[3] In the former case we presuppose a Deity or *zwecksetzender* God as the explanation of order and adaptation, but the inference from effects to cause is precarious. On the other hand, "a requirement of pure practical reason is based on a duty, that of making something (the *summum bonum*) the object of my will so as to promote it with all my powers; in which case I must presuppose its possibility, and consequently also the conditions necessary thereto, namely God, freedom, and immortality". These concepts are indispensable to practical reason and "by the help of an apodictic practical law, being necessary conditions of that which it commands to be made an object, they acquire objective reality". There is "no extension of the knowledge of suprasensible objects, but an extension of theoretical reason and of its knowledge in respect of the suprasensible generally". In this way the Idea of God (together with the other ideas) becomes "*immanent* and *constitutive*", whereas formerly it was transcendent and merely regulative.[4]

The whole attempt to construct a theism which should satisfy practical reason while remaining unacceptable to strict theoretical reason indicates that Kant, while rejecting the content of Wolffian metaphysics, still conforms to its

[1] Konv. VII, Reicke XXI. 576-7. Cp. Konv. I, Reicke
[2] Reicke XXI, 317, 320, 323, 325, 327, 328, 376, 385.
[3] Ber. V. 142. [4] Ber. V.

method. He conceives himself to have established a metaphysic of morals from the pure concept of the moral law without reference to empirical content. But since his criticism of the ontological argument had rendered any such metaphysical method of deducing reality from concepts invalid, nothing remained but that he should secure himself against his own criticism by separating practical knowledge from theoretical knowledge.

The real metaphysical problem that emerges from the facts of moral experience is the problem as to what conception of ultimate reality we are compelled to form if we are to account for those facts. Kant's artificial way of stating the case consisted in maintaining that the existence of God is the necessary guarantee of the ultimate coincidence of virtue and happiness. In other words, the moral life would be inexplicable were the *summum bonum* ultimately unrealisable. If ultimate reality were essentially antagonistic to such coincidence, it is more than doubtful whether the *summum bonum* could persist even as an ideal. In a remarkable passage in the essay[1] written shortly after the publication of the second *Critique*, he declares that if the human race were destined to make progress in virtue from age to age only to be defeated again and again, life would be reduced to a cruel and meaningless farce.

If reality be regarded simply as the bare existence of "matters of fact", then no doubt the life of man is, as Russell has said,[2] "a long march through the night, surrounded by invisible foes, tortured by weariness and pain, towards a goal that few can hope to reach and where none may tarry long". Russell accounts it a strange mystery that "nature, omnipotent, but blind, in the revolutions of her secular hurryings through the abysses of space, has brought forth at last a child, subject still to her power, but gifted with

[1] *Über den Gemeinspruch: Das mag in der Theorie richtig sein, taugt aber nicht für die Praxis*, 1793.

[2] *Philosophical Essays*, 1910, pp. 59 ff., and *Mysticism and Logic*, 1918, pp. 46 ff.

sight, with knowledge of good and evil, with the capacity of judging all the works of his unthinking Mother". But is it possible to conceive that in a world so overpoweringly inimical as Russell depicts, man would ever have come to frame ideals of the character he represents? Is there any ideal that has not been fashioned by the imagination out of the data of actual experience? Professor Dawes Hicks has shown[1] that the process of imagination, like every other mental act or process, is incapable of excogitating its material from inner vacuity. "In imagination, as in perception, there is actually given sense-material, for the most part vaguely and confusedly apprehended . . . which serves as the pivot around which the suggested 'imagery' is grouped, and hence interpreted in objective fashion." And similarly the mind can no more create ideals *ex nihilo* than it can create reality.

Oddly enough, Russell, in another essay in the same volume,[2] himself sees that it is in the discovery that our minds are capable of dealing with material not created by them; above all in the realisation that beauty *belongs to the outer world* as to the inner, that we have "the chief means of overcoming the terrible sense of impotence, of weakness, of exile amid hostile powers, which is too apt to result from acknowledging the all-but omnipotence of alien forces". In point of fact, he urges, "Mathematics takes us into the region of absolute necessity, to which not only the actual world, but every possible world must conform; and even here it builds a habitation, *or rather finds a habitation eternally standing*, where our ideals are fully satisfied and our best hopes are not thwarted. It is only when we thoroughly understand the entire independence of ourselves, which belongs to this world that reason *finds*, that we can adequately realise the profound importance of its beauty."

[1] "On the Nature of Images," *Brit. Journ. of Psychology* (General Section), Vol. XV. Part 2, October 1924, pp. 121 ff.

[2] *Mysticism and Logic*, p. 68. Essay on "The Study of Mathematics".

Here, then, in almost Kantian fashion, Russell conceives of an intellectual sphere in which man is free from the blind mechanism of the world of all-but omnipotent matter. And in this sphere man finds the immutable essences of things, laws to which the world of experience must conform. If this be so, then our ideals, whether of the properties of mathematical objects or æsthetical or moral, far from being fictions, are disclosed to us from a contemplation of the world of fact. The subsistent realm of values, that is to say, is not a realm of fancy, cut asunder from, and opposed to, a refractory world of fact. Truth is truth of fact, and values are values of the realm of fact. The realm of fact is not adequately accounted for unless some explanation be given of the feature of its conformity to timeless law. Kant found that the procedure of scientific explanation would be impossible were it not that nature conforms to a logical system; in a world of physical chaos no principle could ever be formulated. Similarly in a world of moral chaos, in a world where the moral will was always defeated, moral ideals could never be formulated. In the former realm science proceeds by the faith that nothing is ultimately inconsonant with physical *Gesetzlichkeit*, and in the latter realm the moral agent proceeds by a like faith in an ultimate moral *Gesetzlichkeit*. And so the teleology of the world in its total aspect points to an organising intelligence which is at the same time moral.

Kant did not so much as make the attempt to fashion an adequate conception of the intelligent moral originator of nature. Not only had he no true conception of personality, but, as I have already pointed out, the one problem which called for explicit consideration was left in a disappointingly unsatisfactory condition, the problem, namely, of the relation between the intelligible and the empirical "characters". So far as the individual was concerned, the empirical series of his acts was regarded as grounded in the suprasensible intelligible character. And Kant found that the intelligible

characters of moral beings are in turn grounded in a supreme unity or *zwecksetzender* God in the intelligible world. But again it was the Wolffian conception of a static whole or *Inbegriff* that lay in Kant's mind—a conception from which he never completely emancipated himself. In the final chapter I shall endeavour to show the crippling effect of this presupposition on Kant's whole metaphysical enterprise.

CHAPTER X

THE IDEA OF GOD AS ULTIMATE GROUND

Two final questions call for consideration: To what conception of ultimate reality do the facts presented in the realms of contingency, purposiveness, and morality point? Given the indispensability of the Idea of an ultimate rational moral ground of the world of experience, what can be said for the objective validity of such an Idea?

In respect of the former question, I have already indicated that Kant never shook himself entirely free from the traditional, static conception of ultimate reality. Reality for him was ultimately timeless. The category of ground and consequent was taken to be fundamental for the interpretation of the facts of existent reality, with the result that time was reduced to the status of a subjective mode of apprehending. Changes, therefore, were not ultimate, but consisted of the varying relations of phenomena to one another within a system which in its entirety was immutable. This position, notwithstanding the fact that it possesses a long history, has always been fraught with insuperable difficulties. Leibniz was content to point to the common relation of all the monads to the *Monas Monadum*, but while the choice of the best on the part of the divine being determines the release of one universe from the realm of possibility into the realm of actuality, it is the character of the several monads present to the divine mind that determines their relations to one another. That is to say, their compossibility depends in no way upon their common relation to the divine intellect, but upon some ground about which Leibniz leaves us in complete ignorance.

Kant, while recognising time as subjective in character, held at the same time that temporal sequence is essential to that causal relationship which is a necessary feature of the realm of phenomena. Time, he maintained, is a necessary

ingredient of experience; as real as experience itself is real, namely empirically real though transcendentally ideal. It does not arise from impressions given to us from without, neither is it derived by abstraction from the apprehension of events, for the apprehension of any event presupposes time as its logical condition. But while regarding time as a form of perceptive experience, Kant was far from holding that temporal events could be reduced to a mere succession of transient subjective impressions. It was of the realm of *Noumena* that he held that time is ideal, and if, as I have tried to show, the violent opposition between the phenomenal realm and a supposed noumenal realm calls for rejection—if phenomena be regarded as ways in which the real appears —then time (and likewise space) may turn out to be not only phenomenally real, but transcendentally real also.

I venture to maintain that so far from being a form imposed by the finite mind upon the concrete facts of experience which in themselves are supposed to be timeless, time is one of the conditions under which the conscious subject comes to the recognition of its own finitude. It would appear to be more true to say that time is a condition of there being a finite mind than that the finite mind is the condition of time. Time is a condition of that exercise of mental activity by which time itself as an apprehended content can be cognised. This does not of course mean that time is to be conceived as having a reality of its own, or as a kind of entity prior to real events. Mere empty time is a notion to which no objective reality corresponds. It is, indeed, to be questioned whether there is any intelligible sense in which we may say that time exists in the sense in which we may say that concrete facts or events exist. Time is an abstraction from what is concrete fact or events.[1]

[1] In modern phraseology, time (like space) is an abstraction from the continuum of events. The fundamental feature of nature is that it is a becoming, a *γιγνόμενον*. The process of time is but an aspect of the more fundamental relation of "overlapping" or "extending over." (See Whitehead, *Concept of Nature*, p. 58.)

I have tried to show that those thinkers who attempted to deduce existent reality from a timeless substance were one by one compelled to depart from their logical *schema* to the extent of admitting the existence of concrete things and events. Descartes' appeal to the will of God; Spinoza's distinction between the being of the *natura naturata* and the existence of finite modes; Leibniz's conception of the divine choice of the best; all these, like Kant's pre-critical conception of "creation", proclaim the inadequacy of the principle of logical ground and consequent to explain the relation between the One and the Many. Any conception of an Absolute in the sense of a static immutable whole must inevitably fall short of furnishing any real explanation of the phenomena of order, arrangement, sequence, or of the changes in the relations of finite existents to one another.

It was in an extremely halting manner that Kant ventured, during the critical period, to fashion his conception of the "highest formal unity" in terms of an immutable whole. Rejecting the view that ultimate reality is a "sum-total of all possible predicates", he yet maintained that all reality is to be conceived as the ideal systematic unity or rational whole within which all the particulars find their ground of explanation. That is to say, Kant was still thinking of ultimate reality in terms of a *system*, and as such it is a whole which is just as static as the logical *schema* which proved so inadequate in the metaphysics of rationalism. There are indications, however, that Kant never rested in so formal and barren a *schema*. From 1755 onwards he was disposed to ground the systematic whole in a supreme intelligence conceived as an intuitive understanding before which the whole field of phenomenal reality would lie as a complete systematic whole. In the *Dissertation* he represents God as enjoying a mode of intuition which, in contrast with our sensuous intuition, he calls *intuitus intellectualis*—a mode of intuition to which objects are immediately present without "affection of the senses". Our intuition is such that

we can apprehend objects only through sensibility, but in the case of an intellectual intuition no sensuous medium intervenes between the knowing subject and the object known. Objects are intuited as they are in themselves (*Noumena* or *intelligibilia*). Furthermore, the divine intuition is also a *principium objectorum*—a perfect spontaneity with no receptivity. For such a self-active, positing intuition the heterogeneity of thought and intuition is no longer present. The perfect spontaneity of the intellectual intuition renders the factor of sensibility superfluous. An intuitive understanding, then, would not proceed through notions from the universal to the particular, but would intuit the particular as determined in and through the universal, for it would intuit the whole as such. In other words, the whole of the experience of an intuitive understanding would be an *organic* whole admitting of no contingency. The particular would not be something given from without; it would be a product of the understanding itself.

Here, then, the mechanical *schema* implied in the earlier notion of *Inbegriff aller möglichen Prädicate* is in some degree modified, and the *schema* which serves as the general plan of ultimate reality now becomes that of an organic unity. The particular facts find place only in their relation to an organic whole which is present to the divine intuitive understanding. It would be idle to speculate as to how far Kant would have been prepared to go in the direction of the Hegelian contention that Spinoza's Absolute Substance must give place to the conception of Absolute Subject.[1] There is in Kant's writings no indication that he would have given credence to the idea of an infinite consciousness which differentiates itself into the multiplicity of nature and of human life. In the pre-critical period he was perhaps nearer to such absolutism than in his later years. At the same time,

[1] In stressing the essential difference between finite intuition and the divine *intuitus intellectualis*, Kant certainly showed how far he was from identifying the Transcendental Unity of Apperception with God.

one can scarcely avoid the feeling that the difficulty which confronted Hegel's philosophy is present to some extent in Kant's conception of an intuitive divine mind. According to Hegel, the *principium* of all reality is an infinite mind whose mode of being is at once consciousness of self and constructive of what is other than self by externalising its own essence. Nature is accordingly regarded as a system of objective thoughts, or ways in which the Absolute Mind manifests itself. But in whatever way the process of externalising or manifesting is expressed, it seems impossible to maintain the existence, in the same sense, of the timeless Absolute Mind and the particular ways in which the absolute mind manifests itself.[1] The difficulty becomes specially acute in regard to the existence of finite minds. Thus, when it is argued, as by Bradley, that the Absolute exists only in its manifestations, it is virtually admitted that the Absolute does not really exist at all. And on the other hand, when it is a question of defining the place of the finite individuals within the ultimate reality, we find that the only reality which can be assigned to them is not their experiences regarded as processes, but the contents which they experience; not their temporally successive acts of apprehending, but the timeless thought-contents; not their temporal volitions, but the timeless ideals which they will, and so forth. That is to say, all finite individuals are in the ultimate analysis mere connections of content within the Absolute to which they belong—they are predicates, adjectives, or qualities of the Absolute.

Similarly, from Kant's conception of an infinite mind, whose intuition is constructive of what to that mind is not-self, it would seem to follow that phenomenal reality, nature and mind, is no more than a system of objective thoughts or timeless predicates. And the pre-critical problem comes before us with increased intensity when we try

[1] Cp. paper on "Appearance and Reality" by Dawes Hicks in the *Proceedings of the Aristotelian Society*, 1914.

to conceive what the term "existence" as applied to such contents can possibly mean.

The truth is that the whole conception of an intuitive divine mind is discordant with Kant's critical doctrine, grounded as that doctrine is on the fact of change. To whatever kind of conception of a supreme being we may be driven, if that being is conceived as existing, the predicate of timelessness cannot be ascribed to it without sacrificing the reality of finite entities existing under conditions of time and change. If change be real anywhere in the universe, it seems impossible to maintain that the whole is immutable. The notion[1] of time and change as being contained within a timeless and changeless whole is one which seems to help but little in the interpretation of reality, and really amounts to little more than a mere *vox et præterea nihil*. Doubtless if it be meant to represent the totality of events in their succession, it is obvious that the whole cannot change, for the whole includes all changes, past, present, and future. But such a notion seems to me to be sterile, for even if we could envisage a whole of this kind, the notion would contribute nothing to the explanation of the relation between the world of continuous succession and the ideally complete whole, and the problem of time and change would remain precisely as it was before.

Moreover, the notion of a timeless whole seems to owe such plausibility as it possesses to an implied assumption that to an infinite mind the successive events which make up the phenomenal world would be present as a *simultaneous* whole. But there appears no warrant for conceiving that past, present, and future events are capable of being presented as co-existent even to an infinite mind. Without doubt the view of time as a separately existent reality is untenable; time is an abstraction from what is concrete fact or events. But in the conception of reality as a ceaseless stream of events it is not implied that one event ceases

[1] As held, for example, by Bosanquet.

before another begins, nor that previous events endure side by side with subsequent events. There is no persistence of one event together with the coming to be of another event. Change in the universe of existent reality is always continuous, every occurrence being the result of conditions in preceding occurrences. In modern parlance, one duration becomes part of another, which extends over it and beyond it into the future. It is impossible, therefore, that a preceding occurrence should, as such, co-exist with a succeeding occurrence. What is past is no doubt preserved in what is present, but the past event does not exist side by side with the present event. And even an omniscient mind would misrepresent the nature of reality if it were to conceive of existent reality as a changeless whole of continuous events.

Still more difficult is it to conceive individual minds as being embraced as ingredients within the content of a supreme consciousness. The conception of a timeless divine intelligence, of which finite intelligences are differentiations, is one with which, as I have already indicated, Kant would probably have had little sympathy. There seems as little ground for employing the cognitive relation as the key to the relation between God and the human mind, as for employing the category of logical ground and consequent for the explanation of the relation between infinite and finite modes of being. That is to say, the organic *schema* is as little fitted as the mechanical *schema* to serve as our ultimate interpretative concept.

But there is a further concept, and one better fitted than the mechanical or the organic *schema* to serve as the key to the meaning and structure of the universe. It is the concept of personality. Kant came within reach of its employment in the realm of practical reason. There it was laid down that man as a *homo noumenon* is free from all determination through *Erscheinungen*, the ground of his moral action lying in a suprasensible realm. Kant argued that the facts of man's moral life presuppose a systematic unity of ends,

which is itself based on the hypothesis of a supreme original good.[1] The supreme unity definitely loses its formal character, and becomes the intelligent author and supreme member or sovereign (*Oberhaupt*) of the realm of ends.[2] Kant, who had a very imperfect notion of what was implied in the notion of personality, made no attempt to apply that concept to the nature of ultimate reality. But if we must needs interpret the highest in the light of the highest we know, it seems legitimate to argue that the ultimate individual which is the universe is, in its entirety, a complex whole in which the elements of self-consciousness and self-determination, however transcended in a higher synthesis than any form of personality known to us, are nevertheless present. The ultimate individual is the existent, temporal, dynamic, developing, self-creative universe. If it were a timeless static whole, there could be no development. The new is genuinely new so far as its existence is concerned. If this seems to imply another realm where the possible has its being, it is surely sufficient to point out that the realm of the possible is not an existent realm, nor do things come from it into the realm of the actual. Possibility is an abstraction from reality. Nor does this view imply that time is an agent. The universe is an agent, i.e. it is dynamic. The universe is in a condition of continuous creativity. The "not-yet" is in no sense existent. The new is emergent because the universe is dynamic and creative, and its dynamic, purposeful, and creative agency is deity. God cannot be at once the sole ultimate individual and merely the supreme subject or supreme intelligence, for there would in that case be no room for a not-self. But it is possible to conceive God as the sole, ultimate individual whose self is confronted by a not-self which, though not external to him, is as real as the content presented to my processes

[1] *Vide supra*, p. 175.

[2] Ber. IV. 433. In the *Opus Postumum* Kant frequently describes God as a person.

of apprehension when those processes are directed to the events which go to the make-up of my own total personality.

Kant himself points out, and it cannot be denied, that this whole method of treating the problem involves an *argumentum ex analogia hominis*. If it is from our microcosm alone that we have to interpret the macrocosm[1] our thought could scarcely avoid the tinge of the anthropomorphic, or at least of the anthropic. Professor James Ward recently urged[2] that Kant's entire system is in the long run anthropomorphic. Ward argues that Kant's Copernican hypothesis ultimately implies the interpretation of the world in terms of the self, and he further cites Kant's treatment of God in the first *Critique*, of the postulates of morality in the second, and of purposiveness in the third, as illustrating the essentially anthropomorphic character of the critical doctrine itself. Kant himself would probably have disowned any anthropomorphic implications in regard to the deduction of the categories, for it is of the essence of his position that the categories could never be deduced by reflection upon the nature of self-consciousness. In regard, however, to our particular problem, Kant is careful to indicate[3] that while we must reject the *dogmatic* anthropomorphism which attributes to the supreme being certain qualities in themselves, yet (since we must needs interpret the highest in the light of the highest we know) any predicates we may assign to God will inevitably be tinged with symbolic anthropomorphism. To recall his own words: "If it be asked whether we may not conceive this being . . . in analogy with the objects of experience, the answer is, Certainly we may. . . . Can we accordingly assume (*annehmen*) a wise and almighty author of the world? Certainly, we not only *may*, but *must* presuppose (*voraussetzen*) such a being. . . .

[1] Cp. Martineau, *A Study of Religion*, I. 336. Balfour, *Defence of Philosophic Doubt*, p. 244. F. C. S. Schiller, *Formal Logic*, p. 342.

[2] Hertz Lecture on "I. Kant." Cp. *A Study of Kant*, p. 192.

[3] *Transcendental Dialectic*, Ber. III. 459; *Prolegomena*, § 57. Cp. *Die Religio innerhalb, u.s.w.*, and *Über die Fortschritte d. Met.*

And we are justified also not only in representing to ourselves the cause of the world, in accordance with a subtle kind of anthropomorphism (without which we could not predicate anything of it), as a being endowed with understanding, feelings of pleasure and displeasure, and accordingly with desire and will, but also in attributing to it infinite perfection, a perfection far transcending any perfection which our empirical knowledge of the order that is in the world could entitle us to predicate of that being."[1]

I turn, finally, to the question of the objective validity of the Idea of God. One of Kant's central contentions was that the very possibility of a thing depends upon its being able to find a place in the texture of actual experience. Rejecting the Leibnizian view that the possible is prior to the actual, he maintains that the actual is the presupposition of the possible. Only that is possible which might also be actual. In the section on the *Postulates of empirical thinking*, where the possible is defined as that which may have objective reality,[2] i.e. transcendental truth, Kant came near to the point of recognising that the terms possibility, actuality, and necessity have reference not to differences in the objects contemplated, but to differences in the attitude of the cognising mind. The statement that a thing is possible may betoken nothing more than subjective indecision. Objectively regarded, there will be no difference between that which is possible, that which is actual, and that which is necessary. But his lingering adherence to the Leibnizian rationalism, and his servitude to *Architectonic*, led him into inconsistency. He stated his view in terms of three separate "principles" corresponding to the categories of modality: *first, the possible is that which agrees with the formal conditions of experience, namely, the forms of sensibility and the schematised categories; secondly, the actual is that which is connected with the material conditions of experi-*

[1] *Anhang zur transcendentalen Dialektik*, Ber. III. 457 f.
[2] A 222, cp. B 288 ff.

ence (i.e. with sensation); thirdly, the necessary is that which is determined in its connection with the actual according to the universal conditions of experience. In so stating the matter Kant was misled, for from the critical point of view each of these "principles", taken by itself, is open to objection. In particular, he was led to argue, in regard to the first postulate, that the formal conditions (and these alone) may be regarded as possible concepts,[1] a position wholly incompatible with the critical view that the possibility of experience depends upon a conjunction of material and formal factors. He further lapses into the Leibnizian position that concepts may be complete and determinate, even though we know not whether an existence corresponding to them is so much as possible, oblivious of the consideration that since the very function of a concept is to organise and unify the data of sense, *a "mere concept" is a nonentity.* Kant could speak of "mere concepts" only so long as he was viewing concepts as predicates of things in the manner of Leibniz. *A bare possibility is a mere indeterminate somewhat, a mere figment.*

Again, at the end of the section on the *Postulates*, it is unexpectedly announced that the question may still remain open whether the realm of possibility is wider than that of actuality, and the latter in turn wider than the realm of the necessary; for whether there may be other kinds of experience than ours, forms of intuition other than space and time, and forms of understanding different from the discursive—these are questions which in the nature of things cannot be answered by our understanding, but must be handed over to reason, to which alone the concept of "absolute possibility" belongs, since reason goes beyond all possible empirical use of the understanding.[2]

Kant's vacillation regarding the relation of the possible to the actual probably accounts in part for the fact that notwithstanding his sharp severance of the Ideas of reason

[1] A 220 ff. = B 267 ff. [2] A 230 = B 282.

from the categories of the understanding, he never reached any final conclusion regarding the status of the former. On the whole he tended to regard the Ideas as concepts of abstractly possible things as distinguished from objectively real concepts. As already indicated, when under the influence of his more subjective mode of thinking, Kant tends to regard Reason itself as a mere transcendent employment of the understanding, and its Ideas as merely formal principles regulative of the understanding in its interpretation of given experience. When taken to be constitutive they lead to dialectical illusion.[1] In other portions of the first *Critique*, Reason is regarded as a separate faculty, and its Ideas, at their own level, as conditions of the possibility of experience. In the *Appendix to the Transcendental Dialectic*, which may fairly be taken as representing Kant's maturer thought, the two views play with each other, as it were, in such a manner as to leave little doubt about his final hesitation, not to say confusion, regarding the status of the Ideas of Reason. The section starts by defining the function of reason as the process of systematising the knowledge supplied by the understanding. This process presupposes an Idea of a whole which logically precedes determinate knowledge of the parts, and contains the conditions determining *a priori* the place of every part and its relation to other parts. This Idea accordingly demands complete unity in the *Verstandeserkenntniss*, a unity by which that knowledge is not knowledge of a mere aggregate, but a system connected in accordance with necessary laws.

But Kant immediately proceeds to define reason as the faculty of deducing the particular from the general, and to maintain that unless the general be in itself absolutely

[1] This is the view which pervades the earlier discussion of the Antinomies, the discussion of the cosmological argument, and the section on the Explanation of dialectical illusion. That these sections represent Kant's *earlier* view is fairly clear from the fact that the term "transcendental object" is frequently used loosely to describe the thing-in-itself (e.g. A 613–14 = B 641–2). It is characteristic of the later portions that dialectical illusion is attributed to confusion between phenomena and things in themselves.

indisputable, reason can never demonstrate the absolute universality of the rule, and consequently can introduce only a *measure* of unity into the particulars and thus make the rule approximate to universality.[1] The unity which reason demands, while it is the criterion of the truth of a rule, is therefore only a projected unity, to be regarded not as given in itself, but as a problem only. It is a logical principle which comes to the assistance of the understanding in so far as it postulates by means of ideas a systematic unity which cannot be attained by the understanding. Such unity is, accordingly, not objectively necessary, but only subjectively and methodologically (*als Methode*) necessary.[2]

Kant is not content, however, to leave the matter thus. He points out that in its progressive search for unity, reason is bound to rely upon the principle that the particular laws of nature are subject to more general laws. It is not clear, he argues, how there can be a logical principle by which reason prescribes unity of rules unless we also presuppose a *transcendental principle* whereby such systematic unity is *a priori* regarded as necessarily inherent in the objects themselves. Reason would simply run counter to its own vocation if, in its logical use, it could regard the diversity in nature as merely a disguised unity, while at the same time remaining free to regard that unity as contrary to nature. Nor is it possible to maintain that reason had previously deduced this unity from the contingent character of nature. "The law of reason which requires us to seek for this unity is a necessary law, for without it we should have no reason at all, and without reason we should have no coherent use

[1] A 646 = B 674. Cp. *Kritik d. Urteilskraft*, § 90. The only complete proof, Kant thinks, is that which proceeds syllogistically from universal to particular; consequently, since the concept of a suprasensible being cannot be subsumed under the universal principles of the nature of things, that concept remains problematical for us.

[2] As an example, Kant cites the problem of discovering the unity underlying the phenomena of sensation, consciousness, imagination, wit, pleasure, desire, etc. If they can all be traced to a single *Grundkraft*, we thereby introduce a systematic unity which is *bloss hypothetisch*.

of the understanding, and, in the absence of this, no sufficient criterion of empirical truth. To secure such criterion *we must presuppose the systematic unity of nature throughout as objectively valid and necessary.*"[1] This unity, which is the unity presupposed in the scholastic maxim: *entia præter necessitatem non esse multiplicanda,*[2] far from being a mere economical contrivance of reason (*ein bloss ökonomischer Handgriff der Vernunft*) and a "purely hypothetical attempt", is a necessary presupposition of reason. Reason does not here beg (*bettele*), but commands (*gebiete*). He enumerates three principles of Reason, which, in so far as they have a legitimate application, are *transcendentally grounded*, i.e. express conditions necessary for the possibility of the understanding, and therefore of experience. Homogeneity (the above-mentioned maxim) is necessarily involved, inasmuch that were the particulars utterly without similarity, the understanding could never begin its task of subsuming genera under higher genera. The reverse of this is that it is only by the aid of a transcendental principle of specification that the understanding can proceed, in its act of judgment, to distinguish the species within the genus.[3] Thirdly, the logical law of the *continuum formarum logicarum* presupposes a transcendental law, *lex continui in natura*; i.e. the understanding proceeds on the essential presupposition that the phenomena of nature form parts of one systematic whole.

On the one hand, then, the principles of reason are described as heuristic principles regulative of the empirical exercise of reason, and, on the other hand, serving as they do as rules for possible experience, they are declared to possess, as synthetic *a priori* propositions, an objective though indeterminate validity. They could not in the strict sense

[1] In the *Dissertation* (§ 30) this maxim is described as a principle of convenience, i.e. a principle which, though not "derived from the object", must be adopted in order that the intellect may form a judgment about a given object. But the principle of causality is here similarly conceived.

[2] In the scholastic language: Entium varietates non temere esse minuendæ.

be constitutive, for since no sensuous *schema* can be assigned to them they can have no object *in concreto*. Yet since reason seems compelled to pursue the systematic unity of a *Verstandesbegriff*, there can and must be an *analogon* of such a *schema*, the idea, namely, of a *maximum*, or the thought of that which is greatest and absolutely complete, an idea which, although reason can follow only asymptotically as it were, serves nevertheless as a necessary rule for the systematic unity of the exercise of the understanding. And any principle which imposes upon the understanding *a priori* a rule for its systematic guidance relates, although indirectly, to an object of experience, and it is in this sense that the principles of pure reason have objective validity. They determine nothing in regard to an empirical object, but they indicate the procedure by which the empirical and determinate exercise of the understanding may be thoroughly consistent with itself.

Kant seems never to have realised the difference between the two views here presented, and the *Opus Postumum* shows that when he was no longer capable of keeping in one connected view all the numerous threads of his discussion, his observations tend to assume an extreme character; he brings one more or less important aspect into sharp relief at the expense of other indispensable factors. Thus from one point of view he writes of God as *Das Ideal einer Substanz welches wir uns selbstschaffen*,[1] and "not a thing existing outside myself",[2] while from another point of view he writes freely of God as an actual external reality.[3] In general Adickes has shown that it is when Kant is writing from the point of view of strictly transcendental thought that God is declared to be a mere Idea. In the realm of moral philosophy God is again and again affirmed to be an actual reality.[4]

[1] Reicke, XXI. 620.
[2] *Ibid.*, XXI, 417.
[3] *Ibid.*, XXI. 323, 325, 327, 328, etc. Adickes, 781.
[4] The following passage may serve, however, to illustrate the confusion in Kant's mind: The axiom "there is a God" is a necessary hypothesis

It is not without doing violence to the evidence, both in the critical writings and in the posthumous fragments, that Vaihinger can contend that "for Kant no less than for Nietzsche the Idea of God was a mere heuristic fiction". Quite apart from the evidence just offered, Vaihinger's argument is vitiated by the fact that under the *magni nominis umbra* of "fiction" he includes a miscellaneous collection of concepts which exhibit the widest differences. Furthermore, Kant repeatedly and decisively guards himself against conceiving the concept of God as a theoretical hypothesis comparable, say, with the caloric or the ether. Our whole contention has been that he could not on his principles regard the problem inductively, and this contention is amply borne out by the *Opus Postumum*. Doubtless the Idea of God is "self-made", but it is simply an abuse of language to call it a fiction unless it can be shown that no object corresponding to it can possibly exist. Hence Kant speaks of God as "a mere Idea of reason",[1] only to emphasise the point that "God is not an object of the senses, but of reason alone"; for in the passage immediately following, this "mere Idea" is said to have the greatest inward and outward reality. By his patient examination of the MSS., Adickes has shown that in the whole of *Konvoluten VII* and *I*, Kant speaks from the standpoint of the strict transcendental position. If his concentration on one aspect of truth appears to lead him into extreme statements, it must be remembered that he was writing for himself, and with his entire philosophical position always in the background; he did not, therefore, deem it necessary to reiterate his standpoint on every occasion. Had he edited his MSS. for publication, it would have sufficed to have made clear once for all the

(Hypothese!) of pure practical reason; it is also the supreme principle (*der höchste Grundsatz*) of the transcendental philosophy (Reicke, 415). Again, in one set of passages Kant denies that the concept of God is a mere fiction (*Dichtung*), e.g. Reicke, XXI. 358; cp. 341, etc. Yet in others that concept is specifically declared to be a mere *Dichtung*, e.g. XXI. 390; cp. 609, etc.

[1] Reicke, 410.

purely transcendental standpoint, but, with his aphoristic mode of writing, he had to content himself with stating the general results of his reflection from the restricted epistemological point of view without correlating them with his philosophy in its entirety.

To return to the *Appendix to the Dialectic*, it is under the more positive mode of thought that Kant declares that since the Ideas of Reason are not mere *Gedankendinge*, they must admit of some kind[1] of deduction, though it will be different from that of the categories. The deduction of the Ideas is in truth *die Vollendung des kritischen Geschäftes der reinen Vernunft*. An Idea of Reason, he had maintained, is the *analogon* of a *schema* by which we are enabled to represent objects in their systematic unity. It indicates a rule in accordance with which we investigate the constitution and connection of the objects of experience in general.[2] The things of the world must be viewed *as if* they derived their existence from a supreme intelligence; phenomena must be viewed *as if* they had one all-sufficient ground. We do not derive the phenomena from the object of the Idea, but rather extract from the Idea the rule in accordance with which the understanding attains the greatest possible systematic unity.[3] If it can be shown that all the rules of the empirical use of reason lead (under the presupposition of such an "object in the Idea") to a systematic unity and to the extension of our empirical knowledge, without ever running counter to it, it becomes a necessary maxim of reason to proceed in accordance with the Ideas of reason. This is the transcendental deduction of the Ideas of speculative reason; they are shown to be valid (though not constitutive of objects) because indispensable in the progressive task of systematising and completing our experience.

In what respect, then, does the status of the Ideas differ

[1] In the previous section (A 663–4 = B 691–2) Kant had declared the Ideas to be incapable of transcendental deduction.

[2] A 671 = B 699.

[3] A 673 = B 701.

from that of the categories? In strictness a transcendental condition, according to Kant, is a condition of the *possibility* of experience, and although in many places in the *Appendix* he virtually maintains that the Ideas of Reason are involved in each and every experience, yet in the "transcendental deduction of the Ideas" it is on the ground of their indispensability as *methodological* principles that their validity is affirmed. Consequently the Ideas fall short of complete transcendental deduction. To be capable of complete transcendental deduction they must be shown to be involved not only in the systematisation of our experience, but in its very possibility. From Kant's point of view the Ideas were only *indirectly* conditions of the possibility of experience, and consequently possessed no more than a quasi-objective validity.

I have tried to show that the categories could be regarded as actually constitutive of objects, in a manner in which the Ideas could not be, only so long as objects of sense-experience were taken to be complexes of *Vorstellungen*. Setting that impossible assumption aside, the categories evince themselves as principles of interpretation, sharing with the Ideas (in so far as the latter can be shown to be indispensable) the function of systematising and interpreting experience. Further, it is essential to the critical position that the principles of knowability revealed to *Bewusstsein überhaupt*, or self-consciousness at the reflective level, are themselves knowable. They are metaphysically knowable as the conditions under which alone we can have systematised knowledge. That is to say, in addition to objective knowledge, or knowledge of that which conforms to the conditions of knowability, Kant virtually recognises the possibility of metaphysical knowledge, or knowledge of that which *is* universally and necessarily implied in our apprehension of objective reality. Knowledge of the categories as involved in perceptual experience[1] is knowledge of the

[1] *Vide supra*, pp. 111–12.

metaphysical, and had not Kant been misled into thinking that the categories were not only ways in which we interpret existent reality, but actual constituents of the objects experienced, there would have been no obstacle to his holding that in so far as any principle is necessarily involved in the interpretation of reality, that principle is metaphysically knowable. And if the "deduction" of the categories depends upon the fact that they are indispensably involved in the interpretation of any objective fact or event, then the Ideas which are indispensably involved in the interpretation of the wider and more complex features of experience must be admitted on similar grounds. The supreme test of the validity of any concept whatsoever is its indispensability. Ideas and categories are alike ways in which the finite mind cognitively apprehends objective reality. The contents of our thinking, whether in so-called perception or in the higher conceptual activity to which the name is usually restricted, consist of those features of reality which the conscious subject has progressively discriminated in contemplating the inexhaustible realm of cognisable fact. The world of reality involves certain truths which are valid of it, and it is in the attainment of truth about existent reality that category and Idea both find their use and justification. Whatever difference there may be between category and Idea will be determined by the rôle which each plays in the development of knowledge. Confronted with a portion of reality which lays its own constraint upon normal apprehension, the cognising mind frames its tentative concepts, and tests them by their applicability to further fact. The metaphysician works in this same field; he uses similar methods and instruments. Yet his position is not quite the same as that of his fellow-workmen. He is specially interested in what the others are doing. It is his business to examine and test the fundamental presuppositions or categories which they use. He further attempts to survey the universe of reality as a whole. He

knows that there is no end to his quest, but that does not deter him from attempting to formulate the minimum requirements of such a concept.

The "science of metaphysics", far from being impossible, is, then, inevitable. For if it be necessary, in order to complete our conception of the universe, to supplement the limited notions of it, obtainable through the categories, by the Ideas of Reason, then such necessity is surely as reliable a guarantee of knowledge as the power we possess, through means of the categories, of anticipating the general course of experience. True the Ideas are not verifiable in the precise way in which the categories are verifiable, yet if the Ideas are virtually forced upon us as the outcome of the discursive procedure of the understanding, that is as strong a mode of verification as we can hope to acquire.

It will be instructive now to return to the point at which Kant surrendered all claim to metaphysical knowledge. His change of attitude toward the metaphysics of rationalism was the outcome not of the critical philosophy as a whole, but of that phenomenalism which he took to be its essential implication. The *Dissertation* fully recognises the validity of metaphysical knowledge, or purely intellectual knowledge which has no sensuous content. The net result of the *Analytic* is to show that the most the understanding can achieve *a priori* is to anticipate the form of a possible experience *in general*; it can never transcend those limits of sensibility *within which alone objects are given to us. Knowledge is* therefore limited to the phenomenal world. It seemed to Kant to follow that knowledge of that which transcends the bounds of the phenomenal world is for ever impossible.

Quite apart, however, from the wholly untenable distinction between a realm of phenomenal objects and a problematic realm of unknowable things, the critical position by no means entails a rejection of metaphysics as such, but only of the metaphysical sciences, rational psychology, cosmology, and theology, in the form which Wolff had given

to these supposed sciences. Kant is really working with two different conceptions of metaphysics. The first was that with which he was chiefly concerned in the *Dialectic*, where he seeks to determine how far it is possible to establish what Schopenhauer later called the three primary objects of scholastic philosophy, namely freedom, immortality, and God. In respect of these problems Kant arrived at an open verdict; he came to the conclusion that affirmation and denial of the validity of these objects of belief are alike without justification.[1] But, as already indicated, there is implied in the critical philosophy a quite different conception of metaphysics. Notwithstanding the restriction of the term knowledge to objects determined by the understanding in and through the categories, and notwithstanding the essentially critical view that the categories are *a priori* only in reference to their product, it is no less an important position of transcendentalism that there can be knowledge of the conditions of the possibility of knowledge itself.[2] Here was no question of proceeding falsely from mere concepts to objects, but rather that of creating a new method of metaphysics. We have some indication of Kant's partial recognition of the possibility of metaphysical knowledge of this immanent kind in his division of the subject-matter of metaphysics[3] into Ontology, Physiology (rational physics

[1] If there is any partiality, it is on the side of the beliefs, for it is said that if reason is unable to make any positive assertion, *still less* has it the requisite knowledge to make any denials regarding those objects.

[2] Kant further created a basis for a practical dogmatic use of reason. Separating as he thought he could the pure and the empirical parts of the pure sciences of nature and of morals, he constructed the pure object of physics and formulated the pure concept of the moral law. But he was here clearly building on Wolffian foundations, and that he never satisfied himself of the transition from the pure to the real is seen from the fact that he spent much of his old age in seeking such transition. *Vide Opus Postumum.*

[3] The following definitions of metaphysics may be noted:

1764. Eine Philosophie über die ersten Gründe unserer Erkenntniss. (*Über die Deutlichkeit, u.s.w.*)

1766. Eine Wissenschaft von den Grenzen der menschlichen Vernunft. (*Träume.*)

1770. Philosophia prima continens principia usus intellectus puri. (*Dissertation.*)

and rational psychology), Cosmology, and Rational Theology. In the *Vorlesungen über Metaphysik*,[1] where the division is practically the same, it is noteworthy that while the treatment of the problems of cosmology, physiology, and rational theology is closely parallel to the treatment of the same problems in the *Dialectic*, Ontology, to which the general name Transcendental Philosophy is given, is defined as the pure doctrine of the elements of all knowledge *a priori*, and throughout the section on *Ontology*, Kant follows the general lines of the argument contained in the *Analytic*. This at once suggests that he conceives himself to have dealt in the *Analytic* with those metaphysical problems which in the *Lectures* fall under the heading "*Ontology*", and a comparison of the arguments of the two sections leaves no doubt that the "transcendental logic" of the first *Critique* is the equivalent of that section of metaphysics which in the *Lectures* is described as Ontology.[2] In the section on *Phenomena und Noumena* he remarks: The proud name of Ontology, which professes to present synthetical cognitions *a priori* of things in general in a systematic doctrine, must give place to the modest title "Analytic of the Pure Understanding". But reduced in status though it be, Ontology

1783. Reine Philosophie . . . auf bestimmte Gegenstande des Verstandes eingeschränkt. (*Grundlegung zur Met. der Sitten.*)

1785. Das System aller Principien der reinen theoretischen Vernunft-erkenntniss durch Begriffe. (*Über die Fortschritte der Met.*)

1787. In the wider sense: Die ganze (wahre sowohl als scheinbere) philosophische Erkenntniss aus reiner Vernunft im systematischem Zusammenhange.

In the stricter sense: Met. besteht aus der Transcendentalphilosophie (*Ontologia*) und der Physiologie der reinen Vernunft (including Rational Physiology, Rational Cosmology, and Rational Theology). (*Kritik d. r. Vernunft. Zweite Aufl.*)

[1] Published by Pölitz, 1817. Second Edition, 1830.

[2] In the course of his treatment he significantly remarks: Der Begriff des Grundes und der Folge gehört in die Logik, und also nicht in die Metaphysik. . . . In der Metaphysik gehört des Grund unter dem Begriff der Causalität. That is to say, the concept of causality belongs not as the notion of ground and consequent to Logic, but to *Metaphysics*, the contrast between logic and metaphysics exactly corresponding to that between traditional and transcendental logic.

still remains a constituent part of metaphysics, and Kant was unable to deny that we have knowledge of "the elements of knowledge *a priori*".[1] The question is whether there can be knowledge in the other branches of metaphysics, and I have contended that what, on Kant's premises, must be denied is not the validity of metaphysics, but only the validity of a certain type of metaphysics. If the only objects of knowledge are *objects* which have been determined as such in accordance with certain principles of knowability, there can of course be no knowledge of the metaphysical and no knowledge of God. And when Kant denies the possibility of metaphysical knowledge, he does so from this restricted point of view. But his philosophical system is a vindication of the possibility of a genuine metaphysical knowledge. The method upon which he relied for vindicating the *a priori* elements in knowledge, the method, namely, of transcendental deduction, pointed the way to a new metaphysics. Knowledge of the synthetic processes of the understanding, and knowledge of any and every principle involved in the interpretation of reality, depend for their validity upon their indispensability.

Of the indispensability of the concept of God as ultimate ground Kant had no doubt, and although God could not be known as an *object* of experience in the strict sense, yet Kant went so far as to declare that we are not only entitled but compelled (*genöthigt sein*) to posit a real object corresponding to the Idea (*ihr einen wirklichen Gegenstand zu setzen*),[2] an object, however, which for ever eludes our faculty of apprehension. His failure to do full justice to the status of metaphysical principles was due to his imperfect recognition of the significance of his own transcendental method. His bifurcation of the realm of being into knowable phenomena and unknowable noumena made it possible to consign to the latter all that did not belong to the former. God was a problematical object in the intelligible world, and that

[1] Politz, *op. cit.*, p. 19.

[2] A 677 = B 705.

same intelligible world was the unseen reservoir of dynamic activities, the home of free intelligences here and now as well as in the future, and at the same time the very ground of the world of appearances. Kant had so completely divorced the phenomenal and noumenal realms that he was unable to bring them together again. But if the untenable notion of an "intelligible" realm subsisting in isolation from the realm of empirical reality be abandoned, the metaphysical question that comes to light is whether for the interpretation of the universe of existent reality in the entire range of its complexity the notion of God is necessarily required. Further, throughout the critical treatment of the conception of God it is largely the current theological notion that Kant had in mind, and he got little further than the problem as to whether such a transcendent being could in any sense be admitted as a knowable object. But again, the real question is not whether this or that proffered conception of God may be admitted to have objective or quasi-objective validity, but rather what concept of God, of the Unconditioned, of the Absolute, of Reality as a whole, of the supreme Unity or the supreme Ground of reality as a whole, or whatever other name he used, we are compelled to form if we are to do full justice to all the facts of experience so far as we have ascertained the nature of those facts. This problem, although it was never resolutely faced by Kant, is nevertheless presented in various forms in the critical writings. Kant's contention along the several lines of treatment which we have followed is that the notion of an infinite ground is required to supplement what is apprehended in and through sense-perception, in order that our conception and our systematisation of the world of reality may be complete. Under the stress of an ever-widening view of the nature of real existence he was compelled to supplement "theoretical knowledge" in more ways than one, but the conception of a supreme mind as the ultimate ground of the world as apprehended by us is never far removed from the critical

philosophy. The essential meaning of the doctrine of a transcendental unity of apperception is that there can be no fact which in its nature is out of relation with the unity of intelligence; that the actual relations of existent entities are relations capable of expression in terms of thought. Again, the purposiveness which the "reflective judgment" is compelled to ascribe to nature in order that the *a priori* and the contingent elements may be capable of being brought together is declared to be inexplicable save as it is judged to be due to a supreme intuitive understanding. And finally, the facts of the moral life compel Reason to postulate a supreme author of the moral order. It would seem to matter little whether we describe our subjective attitude toward such supreme ground as knowledge, practical certainty, belief, or what not; if our interpretation of the universe of fact be left incomplete except as we form some conception of a supreme being as the ground of its unity, its *Gesetzlichkeit*, and its natural and moral *Zweckmässigkeit*, such a principle would appear to have equal claim with the categories to be considered transcendentally, i.e. metaphysically necessary.

APPENDIX

TRANSLATION OF KANT'S PRINCIPIORUM PRIMORUM COGNITIONIS METAPHYSICÆ

NOVA DILUCIDATIO, 1755

A New Exposition of the First Principles of Metaphysical Knowledge

REASON OF THE UNDERTAKING

BEING about, as I trust, to throw some light on the first principles of our knowledge, and it being my intention to expound in the fewest possible pages my meditations on the subject, I have studiously avoided prolix windings, laying bare only the sinews and limbs of my arguments, leaving aside all elegance and grace of language as mere clothing. In this attempt I have had to deviate from the opinion of distinguished men, and sometimes even to mention them by name. I am so well persuaded of their fairmindedness that I am confident that this will in no way detract from the honour which is due to their merits, and can in no way be taken badly by them. For when opinions differ, every man may hold to his own, and it is not amiss to scrutinise the arguments of others, so long as bitterness and the thirst for contention are absent; and I am not aware that this is ever thought by fair judges to be contrary to the obligations of politeness and esteem.

Accordingly I will, in the first place, attempt to bring to the test of a more careful investigation those statements which are put forward, as a rule more confidently than accurately, regarding the pre-eminence of the principle of contradiction as supreme and indisputable above all truths. I will then try briefly to expound what can be more correctly put forward under this head. Then, as to the law of sufficient reason, I will state what is requisite to its greater accuracy of meaning and proof, together with the difficulties which seem to confront it. And when I have stated these difficulties, I will answer them by such force of argument as my moderate ability allows. Finally, carrying my survey somewhat further, I shall put forward two new principles of metaphysical knowledge, of an importance not, it seems to me, to be despised, not indeed those primitive and elementary ones, but, for that reason, even better adapted for use, and what is more, of the widest possible extension. In this attempt, however, since it is comparatively easy for one entering upon an untrodden path to slip into error, I am convinced that the kind reader will judge fairly and accept in good part what I have to say.

SECTION I

CONCERNING THE PRINCIPLE OF CONTRADICTION

ADMONITION

SINCE in the present matter I must be brief, I think it advisable not to write down once more the definitions and axioms which are current in ordinary knowledge and consonant with right reason; nor to emulate by imitating their manner those who, servilely bound by I know not what law of method, fancy that they have not proceeded methodically, and rationally, unless they have reviewed from the beginning to end everything they have found in the writings of philosophers. That this which I do deliberately may not be imputed to me as a fault, I have thought it right to warn the reader beforehand.

Proposition I.—There is not one *sole*, absolutely first, universal principle of all truths.

A first and truly sole principle must necessarily be a simple proposition. If it tacitly embraced other propositions it would only assume the superficial appearance of a sole principle. And thus if a proposition be truly simple it must be either affirmative or negative. But I contend that if it be either one or the other it cannot be universal, embracing under itself all propositions whatsoever. For if you say that it is affirmative, it cannot be an absolutely first principle of negative truths; if negative, it cannot take the lead among positive truths.

Suppose the proposition to be negative. Then, since the consequences of all truths from their own principles are either direct or indirect, who does not in the first place see that by the *direct* method of arguing, only negative conclusions can be deduced from a negative principle? And if you postulate that affirmative consequences follow from them *indirectly*, you will acknowledge that this can be so only through the mediate proposition: *that of which the opposite is false is itself true.* Now this proposition, being itself affirmative, cannot follow from a negative principle by a direct method of arguing, still less indirectly, because for that it would require its own support; consequently by absolutely no method will it follow from a principle negatively enunciated. Accordingly, since affirmative propositions cannot proceed from a solitary negative and sole principle, this principle cannot be called *universal.* Similarly, if you lay down as your

cardinal principle an affirmative proposition, negatives will certainly not follow from it directly, while for indirect conclusions there will be required the proposition: *If the opposite of anything be true, it is itself false.* That is: *If the opposite of anything be affirmed, it is itself denied,* which, since it is a negative proposition, again can in no way be deduced from an affirmative proposition —neither directly, which is self-evident, nor indirectly, except by taking itself for granted. Whatever, then, be your supposition, you will not decline to accept the proposition which I have laid down above, the proposition, namely, that there cannot be one sole, ultimate, universal principle of all truths.

Proposition II. —There are two absolutely first principles of all truths: the one of affirmative truths, the proposition, viz., *Whatever is is;* the other of negative truths, the proposition, viz., *Whatever is not is not.* Taken together these are jointly called the principle of Identity.

Again I call attention to the two methods of demonstrating truths, viz. the direct method and the indirect. The first method of argument establishes truth from the agreement of the notions of subject and predicate, and always lays down this fundamental rule: Whenever a subject considered either in itself or in a connection affirms those things which involve the notion of the predicate, or excludes those things which are excluded by the notion of the predicate, it must be concluded that the latter coincides with the former. Or to put the same thing a little more clearly: whenever identity is found between the notions of subject and predicate, the proposition is true. This, expressed in the most general terms, as becomes a first principle, runs: *Whatever is is, and whatever is not is not.* Accordingly the principle of identity governs every direct argument, that is to say, it is a first principle.

If you inquire into the indirect method of argument, you will find, ultimately, the same dual principle as its basis. For recourse must always be made to these two propositions: (1) That of which the opposite is false is true, i.e. that of which the opposite is denied is affirmed. (2) That of which the opposite is true is false. The first of these has for its consequences affirmative propositions, the other negative. If you express the former proposition in its simplest terms, it runs thus: *Whatever is not not, that thing is* (since the opposite is expressed by the particle "not", and its removal by the particle "not"). You frame the latter in the following way: *Whatever is not is not* (for here again the

statement of the opposite is expressed by the particle "not", and the statement of its falsity or removal is likewise expressed by the same particle). Now if, as the law of signs requires, you follow out the force of the terms contained in the former proposition, because the one particle "not" indicates that the other is to be deleted, when both are deleted the proposition will run: *Whatever is is.* But since the other runs: *Whatever is not is not,* it is evident that in indirect demonstration also the double principle of identity has the first place, and consequently is the ultimate basis of all knowledge whatsoever.

Scholium.—There is an example—a trifling one, no doubt, but not entirely to be despised—in the art of combining symbols, for the simplest terms which we use for expounding these principles differ scarcely at all from symbols. To take this opportunity of setting forth what I think about this art which, after Leibniz had announced its discovery, all the eminent men complained was buried in the same tomb as the great man himself, I confess that this pronouncement on the part of that great philosopher reminds me of the will of that old man in Æsop's Fables who, when just about to yield up the ghost, disclosed to his children that he had concealed treasure somewhere in a field, but before he had indicated the place, suddenly expired. This led his sons industriously to turn up the soil and cultivate it by digging, until, although frustrated in their hopes, they were certainly made richer by the fertility of the land. I venture to say that this is the only fruit to be expected from the investigation of that famous device of Leibniz, if, that is to say, there are any who are prepared to persevere with the task. But if open confession is right (as it surely is), I fear that what the acute Boerhaave suspects in chemistry concerning the celebrated craftsmen among the alchymists has likewise befallen that distinguished man. In their case, after many curious secrets had been discovered, they at length thought that everything would be in their power so soon as they put their hand to it, and by a sort of hasty anticipation talked of those things as actually done which they inferred could be done, or rather ought to be done as soon as they turned their minds to doing them. For my part, if we are dealing with absolutely first principles, I do not deny that some method of symbolism is permissible, since there is occasion for the use of notions, and therefore terms, of the simplest nature as signs. But when complicated knowledge comes to be expressed with the help of

symbols, all clearness of mind suddenly sticks as it were on a rock and is encumbered in inextricable difficulty. I find that the illustrious Daries also, a philosopher of great repute, tried to render the principle of contradiction explicit by the help of symbols, expressing an affirmative notion by the sign + A, a negative by the sign − A; whence appeared the equation + A − A = o, i.e. to affirm and to deny the same thing is impossible, or nothing. But in this attempt I would say with all respect to such a great man that I cannot fail to observe a begging of the question. For if to the sign of a negative notion you assign the function of denying the corresponding affirmative, obviously you are assuming the principle of contradiction in which it is maintained that opposite notions destroy each other. But our explanation of the proposition: *That of which the opposite is false is itself true*, is immune from this fault. For when enunciated in the simplest terms it runs: *Whatever is not not, that thing is*. By removing the particles "not" we do nothing other than follow out their simple significance, and there emerges, as was necessary, the principle of identity: *Whatever is is*.

Proposition III.—To establish further the precedence of the principle of identity over the principle of contradiction for the purpose of securing a *principatum* in the hierarchy of truths.

A proposition which assumed for itself the name of the absolutely supreme and most general principle of all truths should be announced first in the simplest, then in the most general terms, and this, so far as I can see, is indubitably the case with the dual principle of identity. For of all affirmative terms the simplest is the little word "*is*", and of negative terms, the little word "*is not*". Then nothing can be conceived to be more universal than the simplest notions. For the more complex borrow light from the simple, and because they are more determinate than the simple they cannot really be general.

The principle of contradiction which is expressed in the proposition: *It is impossible that the same thing should at the same time be and not be*, is actually only a definition of the *impossible*. For whatever contradicts itself, or what is conceived at the same time to be and not be is called impossible. But in what way can it be established that all truths ought to be referred to this definition as to the Lydian stone? For it is neither necessary that you should vindicate any truth from the impossibility of its opposite, nor, indeed, is this sufficient in itself. For the passage to the assertion of truths is not made from the impossibility of

the opposite except through the mediating assertion: *That of which the opposite is false is itself true*, and this therefore divides its authority with the principle of contradiction, as was above shown.

Finally, who is there to whom it does not seem harsh and somewhat worse even than paradoxical to give the primacy, and particularly in the matter of truths, to a negative proposition, and to pay respect to it as head and foundation of all, when it is not evident why a negative truth should possess this right over an affirmative truth? We rather maintain that, since both are species of truths, so there are two first principles, the one affirming, the other denying.

Scholium.—Perhaps this discussion, subtle and laborious as it is, may appear to some also superfluous and devoid of all utility. And if you are looking for fruitfulness of consequences, I agree with you. For the mind, although not taught such a principle, is unable to refrain from everywhere using it spontaneously and by a certain necessity of its nature. And for that very reason, is it not worthy material for discussion to follow the chain of truths to its very last link? And, indeed, it certainly cannot be deemed of little account to inquire more intimately in this way into the law of reasoning of our mind. To mention only one thing, since all our reasoning is resolved into the discovery of an identity of predicate with subject, considered either as it is in itself or in a combination, as is evident from the ultimate rule of truths, hence we see that God does not require the process of reasoning because, since all things are crystal clear to his gaze, one act of re-presentation puts before his intelligence which things are identical and which are not, and he has no need of analysis as the darkened night of our intelligence necessarily has.

ON THE PRINCIPLE OF THE DETERMINING REASON, COMMONLY CALLED THE PRINCIPLE OF SUFFICIENT REASON

Definition

Proposition IV.—To determine is to affirm a predicate with the exclusion of its opposite. That which determines a subject in respect of a certain predicate is called the reason. Reason is differentiated into that which determines *antecedenter* and that which determines *consequenter*. That is *antecedenter determinans*, the notion of which precedes that which is determined; that is to say, when it is not supplied, the determined thing is not intelligible.[1] That is *consequenter determinans* which would not be affirmed unless a notion which is determined by itself had already been affirmed from some other source. You may call the former the reason why (*cur*) or the reason of being or becoming, the latter the reason that (*quod*) or the reason of knowing.

Construction of a Definition of Reality

The notion of reason, according to common opinion, effects a combination and connection between a subject and some predicate. It always requires therefore a subject, and some predicate to unite with it. If you seek the reason of a circle, I in no way understand what it is you are after unless you add a predicate, e.g. that it is the most capacious of all isoperimetrical figures. We ask, for example, the reason of the evils in the world. We have then the proposition: The world contains many evils. The *ratio quod* or reason of knowing is not sought, because experience takes the place of that, but the *ratio cur* or reason of becoming must be indicated, i.e. when it is affirmed, it is intelligible that the world is not indeterminate antecedently in respect of this predicate, but by means of it there is affirmed the predicate of evils with the exclusion of the opposite. A reason yields therefore the determined from the indeterminate. And since all truth operates by the determination of a predicate in a subject, the *ratio determinans* is not only a criterion of truth but also its source, and if you leave this out of account very many possible things would be found, but nothing true. Thus

[1] With this may be included the "identical" reason, where the notion of the subject determines the predicate through its own perfect identity with it.

it is for us indeterminate whether the planet Mercury rotates about an axis or not, for we are without a ground or reason which enables us to affirm one or the other of these statements to the exclusion of the opposite; otherwise each remains possible, and neither is established as true so far as our knowledge is concerned.

In order to illustrate the distinction of grounds determining *antecedenter* and *consequenter*, I cite the case of the eclipses of the satellites of Jupiter, which I affirm supply a *ratio cognoscendi* of the successive propagation of light taking place at an assignable velocity. But this is a ground determining that truth only *consequenter*. For if the satellites of Jupiter had not existed at all, and there had been no successive occultation of them, light would still have been propagated in time, although it would possibly not be known to us; or to come nearer to the given definition, the phenomena of the satellites of Jupiter, proving the successive motion of light, presuppose this same property of light without which they could not so happen, and so they determine the truth only *consequenter*. But the *ratio fiendi* or reason *why* the transmission of light is connected with an assignable lapse of time is to be found (if we adopt the view of Descartes) in the elasticity of the elastic globules of ether. For in accordance with the laws of elasticity these globules yield in some measure to the impact, and, when this process goes on through an immense concatenated series, eventually render the phenomenon perceptible. This would be a ground which determines antecedently, or, in other words, in its absence there would obviously be no *determinatum*. For if the globules of ether were perfectly hard, no interval of time would be perceived between the emission and the incidence of the light through distances however immense.

The illustrious definition of Wolff (for it has great renown) here seems to me to need correction. For he defines a reason as that by which it is understood why a thing is rather than is not. Here he undoubtedly includes in the definition the thing defined. For although the little word "why" seems sufficiently adapted to the ordinary intelligence to enable it to be included in a definition, yet tacitly it once more implies the notion of reason. For if you carefully examine the matter, you will find that it signifies the same as "for what reason". This substitution having been duly made, the Wolffian definition will read: A reason is that from which it can be understood for what reason a thing is rather than is not.

Similarly I have thought it better to substitute for the term *sufficient reason* the term *ratio determinans*, and I have in so doing the support of Crusius. For "sufficient" is an ambiguous word, as he conclusively shows, since it is not on the face of it clear how much suffices; but seeing that to determine means to affirm in such a way that every opposite is excluded, it denotes that which certainly suffices for conceiving a thing thus and not otherwise.

Proposition V.—Nothing is true without a determining reason. Every true proposition indicates that a subject is determined in respect of a predicate, i.e. that it is affirmed with the exclusion of its opposite. Hence in every true proposition the opposite of the predicate in question is necessarily excluded. And the predicate to which the other asserted proposition is repugnant is excluded in virtue of the principle of contradiction. Therefore there is no exclusion when there is no notion repugnant to an opposite which shall be so excluded. Thus in every truth there is something which determines the truth of the proposition by excluding the opposite predicate. And since this comes under the name of a determining reason, we must lay it down that nothing is true without a determining reason.

Another proof of the same thing. From the notion of reason we can know which of the opposite predicates must be attributed to the subject and which must be removed. Affirm anything to be true without a determining reason, there will be nothing present whence it would be apparent which of the two opposites must be attributed to the subject and which removed. Neither, therefore, is excluded, and the subject is, in respect of each of the two predicates, undetermined. Hence there is no place for a truth which, although it was assumed to subsist, is exhibited with manifest contradiction.

Scholium.—It has been established by the common consent of mankind that knowledge of truth is based on an intuition of the reason. Now we have repeatedly been content with a *ratio consequenter determinans* when concerned only with a question of certainty. But it is quite clear from the alleged theorem, and from the definition considered conjointly, that a *ratio antecedenter determinans*, or, if you prefer, a genetic, or at least identical reason, is always present, for, of course, a *ratio consequenter determinans* does not bring truth into being, but explains it. Let us go on, however, to grounds that determine existence.

Proposition VI.—It is impossible that anything should have the reason of its own existence in itself.

For whatever contains in itself the reason of the existence of something is the cause of that thing. If, therefore, it be affirmed that there is something which has the reason of its existence in itself, then that entity would be the cause of itself. But since the notion of cause is in nature prior to the notion of the thing caused, and the latter posterior to the former, the same thing would be at the same time prior to and posterior to itself. And that is absurd.

Corollary.—Whatever, therefore, is said to exist absolutely necessarily, exists not on account of a certain reason, but because the opposite is plainly not thinkable. The impossibility of the opposite is the ground[1] of the knowledge of its existence, but it is entirely without any *ratio antecedenter determinans*. It exists; and in respect of the entity in question, to have affirmed this, or indeed to have conceived it, is enough.

Scholium.—Now I find in the writings of recent philosophers the view repeatedly put forward, that God has the ground of his existence in himself. But I am unable to agree. To these worthy men it seems rather too drastic to deny to God, as the ultimate and most complete principle alike of grounds and causes, a cause of himself; and so, because there cannot be any ground of his being beyond himself, they say that he has that ground concealed within himself. But surely scarcely anything could be more remote from right reason. For when in a chain of reasons you come to a beginning, it is thereby clear that you have come to a stop, and that the inquiry is obviously brought to an end by the answer being completed. I know, of course, that appeal may be made to the very notion of God, and they postulate that his existence is determined in this notion; but it is evident that this holds good in the ideal, and not in the real order. You form for yourself a notion of some entity in which there is completeness of reality. It must be acknowledged that, given this conception, existence should be attributed to such a being. And so the argument proceeds: If in any being all realities without distinction are united, that being exists; if they are only *conceived* as united, its existence also is an existence only in ideas. The proposition, therefore, should rather be stated in

[1] For the sake of clearness I have sometimes translated *ratio* as "reason" and sometimes as "ground".—[Tr.].

this way: In framing for ourselves a notion of a certain being which we call God, we have framed it in such a manner that existence is included in it. If, then, the preconceived notion be true, it is also true that God exists. So much at any rate may be said for the sake of those who assent to the Cartesian argument.

Proposition VII.—There is a being whose existence is prior to the very possibility both of itself and of all things; this being, therefore, is said to exist absolutely necessarily. That being is called God.

The possibility of certain conjoined notions only is summed up in the idea of non-repugnance and in that way the notion of possibility comes from conjunction. Moreover, in every instance of conjunction, the things conjoined must be present, and where there is nothing at all, there can be no conjunction or corresponding notion of possibility. It follows, therefore, that nothing can be conceived to be possible unless whatever of reality there is in every possible notion do exist, and, indeed, absolutely necessarily—for if this latter be denied, nothing at all will be possible, i.e. there would be only the impossible. Further, this complete reality must be united in a single being.

For if it be posited that these real characteristics, which are, as it were, the material of all possible conceptions, are distributed among many existent things, any one of these things would have its existence limited in a certain way, i.e. connected with certain privations. Since absolute necessity is not comprised in these in the same way as in real things, and since nevertheless these privations pertain to the complete determination of a thing, apart from which a thing cannot exist, realities limited in this way would exist contingently, and so for absolute necessity it is requisite that they should exist apart from all limitations, i.e. should constitute an infinite being. Since plurality (if you assume it) would be a repetition of this being, and hence a contingency opposed to absolute necessity, only one being must be affirmed to exist absolutely necessarily. God, therefore, and one God only, is given as the absolutely necessary principle of all possibility.

Scholium.—This is the demonstration of divine existence, essential so far as such is possible, and although there cannot really here be any question of genesis, it is nevertheless proved by an argument of the very first order, viz. the actual possibility

of things. It is clear, therefore, that if you take away God, not only all existence of things but even the internal possibility of them is also absolutely abolished. For although it is customary to describe essences (which consist in internal possibility) as necessary, and in common parlance *absolutely* necessary, yet they would be more rightly said *to coincide absolutely necessarily with things*. For the essence of a triangle which consists in the conjunction of its three sides is not in itself necessary. What sane person would contend that it is in itself necessary that the three sides should always be conceived as conjoined? This indeed I concede is necessary to a triangle, that if you think a triangle you must necessarily think its three sides, and that is the same as saying that "if anything is, it is". But how it comes about that to the thought of the sides, of the enclosing of space, the other ideas follow, namely that it be in a genus which is thinkable (whence every notion of a thinkable thing comes by combining, limiting, or determining), this could not in any wise be conceived unless in God, the source of all reality, there existed everything that is in a real notion.

We know, of course, that Descartes put forward an argument for the divine existence drawn from the internal notion of that existence. How he was in fact misled in this you can see in the scholium of the preceding paragraph. Among all beings God is the only one in whom existence is prior, or, if you prefer, identical with possibility. And no notion of that possibility remains as soon as you separate it from his existence.

Proposition VIII.—Nothing that exists contingently can be without a reason antecedently determining its existence.

Suppose it to be without a reason. There will then be nothing to determine it as existing except the existence itself of the thing. Since, therefore, its existence is none the less determined (i.e. is affirmed in such a way that every opposite of its complete determination is entirely excluded), there will be no exclusion of the opposite other than that which springs from the affirmation of existence. Now since this exclusion is identical (since nothing else forbids that the thing should be non-existent than that its non-existence be removed), the opposite of its existence is *per se* excluded, i.e. will be absolutely impossible. In other words, the thing will exist absolutely necessarily, which contradicts the hypothesis.

Corollary.—From these arguments it is therefore evident that it is the existence only of contingent things that needs the basis

of a determining reason, and that the one absolutely necessary being is exempt from this law. Hence the principle must not be admitted in such a general sense that it embraces in its dominion the universe of all possibilities.

Scholium.—We reach at last the proof of the principle of determining reason, illuminated, as it appears to me, by every light of certainty. It is sufficiently obvious that the ablest philosophers of our time, among whom I single out the illustrious Crusius for special honour, have constantly complained of the insufficient demonstration of this principle, a deficiency observable in all works on the subject. The great man despaired so much of rectifying this deficiency that he seriously contended that this proposition even is quite incapable of proof, if it be granted to be as true as you could wish. But I must now give the reasons why the proof of this principle was not so clearly and briefly advanced by me as to finish it entirely, as is usually attempted, in a single argument, but that it was necessary to arrive at complete certainty only by a circuitous process.

For in the first place I had to distinguish carefully between reason of truth and reason of existence, although it might seem good to extend the universality of the principle of determining reason in the region of truths equally over the realm of existence. For if nothing is true (i.e. if a predicate does not agree with a subject) without a determining reason, it follows that without such a determining reason there will be no predicate of existence. It is admitted that for establishing a truth there is no need of a reason determining antecedently, but that it is sufficient that an identity should subsist between predicate and subject. But so far as existing things are concerned there is the question as to the reason antecedently determining, and if there be none, then the being in question exists absolutely necessarily; but if the existence be contingent, I have shown it to be unanswerable that there cannot but be a reason antecedently determining. Hence the truth, being drawn from its very sources, has come forth the more limpid.

That very distinguished man Crusius thinks that some existing things are so determined by their own actuality that it is, he says, vain to require anything else besides. Titius does something of his own free will. I ask: Why did he do this rather than not do it? He replies: Because he willed it. But why did he will it? This, he asserts, it is futile to ask. If you ask: Why did he not rather do something else?, he replies: Because he is now

doing this. So he thinks a free volition is, in act, determined through its own existence, not antecedently through reasons prior to its own existence. And he contends that by the mere affirmation of actuality all opposite determinations are excluded, and that there is, therefore, no need for a determining reason. Let me show, however, by another argument, that if you abandon the reason determining antecedently, a contingent thing is never sufficiently determined, and hence cannot be existent. An act of free volition exists. Its existence excludes the opposite of this determination. But since formerly it was non-existent, and the existence does not in itself determine whether formerly it was or was not, the question whether or not it existed before is not determined by the existence of this volition. Yet, because in a complete determination this is the main question of all, whether a thing had a beginning or not, a being will be so far undetermined, and will not be able to be determined unless, in addition to those things which are part of its intrinsic existence, notions are taken in consideration which can be the subject of thought quite apart from the existence of the thing in question. But since that which determines the former non-existence of a thing precedes the notion of its existence, and that which determines that an existent being did not previously exist, has at the same time determined it from non-existence to existence (because the propositions (i) why that which now exists did not formerly exist, and (ii) why that which formerly did not exist now exists, are really identical), i.e. since it is a ground antecedently determining existence, without this also it is abundantly evident that there can be no question of the complete determination of that entity which is conceived to have begun, and hence no question of its existence. If this demonstration seems to anyone somewhat obscure owing to the rather subtle analysis of the notions, he can be content with what preceded.

Finally, let me more briefly explain why I have declined to acquiesce in the proof employed by the renowned Wolff and his followers. This illustrious man's proof, as it is clearly expounded by the keen-sighted Baumgarten, comes in a few words to this: If anything had not a reason, its reason would be nothing; therefore nothing would be something, which is absurd. The line of argument should, however, rather be fashioned thus: If there be not a reason for a thing, the reason of it is nothing, i.e. a non-entity. This, indeed, I concede with both hands, since if there be no reason, the concept answering to it will be a concept of non-entity; hence if no reason can be assigned to

an entity, except one to which no concept corresponds, that entity will entirely lack a reason; and we return to the supposition. Hence the absurdity does not follow which they thought followed from it. I will give an example in support of my contention. According to this mode of reasoning I would undertake to prove that even the first man was begotten of some father. For, suppose that he was not. Then there would be nothing which had begotten him. He would therefore have been begotten by nothing, and since this is contradictory it must be confessed that he was begotten by something. It is scarcely difficult to extricate oneself from the fallacy of this argument. If he has not been begotten, then nothing has begotten him. That is to say, he who would be thought to have begotten him is nothing or is a non-entity, which, indeed, is as certain as anything can be; but the proposition turned the other way round makes the most unmitigated nonsense.

Proposition IX.—To enumerate and solve the difficulties which seem to beset the principle of the determining reason, commonly called the sufficient reason.

Among those who impugn this principle, the acute Crusius may be rightly considered[1] as leading the attack, and alone of all as being able to hold his position. I regard him as being scarcely second to any, I will not say among the philosophers of Germany, but among the teachers of philosophy. If my discussion of his doubts turns out well (which the championship of a good cause seems to promise), I shall account myself to have overcome all difficulty. In the first place, he exposes the ambiguity and uncertain meaning of the formulation of this principle. For, as he correctly remarks, the *ratio cognoscendi*, and likewise the moral reason and other *rationes ideales*, are repeatedly taken for real and antecedently determining reasons; so that often it can only with difficulty be known which you desire to be understood. This weapon, seeing that it does not hit our contentions, need not be parried by us. He who examines my arguments, of whatever sort they be, will see that I carefully distinguish the *ratio veritatis* from the *ratio actualitatis*. In the former it is merely a question of asserting a predicate, the

[1] I do not here desire to detract from *Daries*, whose arguments, as well as those of some other people, I hold to be of great moment in the attack on the principle of *ratio determinans*. But since they seem to be closely related to those which are to be alleged by the excellent D. Crusius, I think that I can restrict my refutation of doubts more particularly to those points, without incurring the displeasure of those no doubt great men.

assertion being effected through notions involved in the subject either absolutely or in an observed *nexus*, for there is disclosed only identity with a predicate, the predicate being inherent in the subject. In the latter the question concerns those predicates which are affirmed to be so involved, and examination is made not as to *whether*, but as to *whence* their existence is determined. If nothing is present which excludes the opposite except the absolute positing of the thing in question, it must be regarded as existing in itself and absolutely necessarily. But if it be assumed to exist contingently there must be present other things which by determining it thus and not otherwise, antecedently exclude the opposite of its existence. So much, then, for our demonstration in general.

More danger certainly threatens the defenders of the principle from that objection of the distinguished man, in which, with eloquence and with admirable strength of argument, he stigmatises our position as involving the immutable necessity of all things (that is to say, the Stoic Fate restored to its former status), and, moreover, the impairment of all liberty and morality. His argument, which, although not altogether new, is nevertheless set forth in greater detail and more powerfully by him, I will state as concisely as can be, without, however, lessening its force.

If whatever happens cannot happen otherwise unless it have a reason determining it antecedently, it follows that *whatever does not happen is also unable to happen*, because clearly no reason is present, and without a reason it is quite impossible that it should happen. And since this much must be granted in retrogressive order concerning all reasons of reasons, it follows that all things take place in natural conjunction, so connectedly and inseparably, that he who desires the opposite of a particular event, or even of a free action, is desiring the impossible, for the reason required for producing it is not present. And so by reviewing the unalterable chain of events which, as Chrysippus says, once for all rolls and winds through an agelong series of consequents, the sole ultimate reason of events and the fertile ground of so many consequents is found at last in the first state of the world, which directly exhibits God as creator, from which ground, when affirmed, others are derived, and others from them, throughout the ages that follow, by an ever fixed law. The distinguished man attacks the well-known distinction between absolute and hypothetical necessity, by which his opponents thought, so to speak, to escape through a crack—a

distinction which obviously is of no moment for mitigating the force of efficacy of necessity. For what does it matter whether the opposite of an event, which is exactly determined by antecedent reasons, be conceivable when it is contemplated *per se*, seeing that this opposite cannot in any way really take place, inasmuch as those reasons are not present which are necessary for it to exist, but rather reasons are present for the contrary? The opposite of an event taken in isolation, you say, can nevertheless be conceived, and is therefore possible. But what then? Nevertheless it is not able to be, because that it should never *be* in actuality is sufficiently secured through reasons already existing. Take an example. Caius is guilty of an imposture. Inasmuch as he is a man, sincerity was not, of course, contrary to Caius through his primitive determinations. I grant it. Nevertheless, as he is now determined it is undoubtedly repugnant to him, because there are present in him reasons which posit the contrary, and sincerity cannot be attributed to him without disarranging the whole sequence of interwoven grounds right back to the first condition of the world. Let us now hear what this illustrious man next concludes. The determining reason brings about not only that this action rather than any other should take place, but that it is impossible for anything else to happen in its place. Whatever therefore happens in us, provision for its consequence has been so arranged by God that it is obviously impossible that anything other should follow. The imputation of our deeds does not, therefore, pertain to us, but God is the one cause of all things, and he has bound us by those laws so that we must fulfil in some way our destined lot. Is it not so arranged that no sin can be displeasing to God? Because when a sin happens, it at the same time testifies that the series of implicated events fixed by God did not admit of anything else. Why then does God blame sinners for deeds which, although they have committed them, have been already through and through provided for from the conception and origin of the world?

Refutation of Doubts

When we distinguish hypothetical necessity, moral in kind, from absolute necessity, the question is not concerning the force and efficacy of necessity, whether, namely, a factor in one event or another is either more or less necessary; the question is concerning the necessitating principle, namely *whence* a thing is

necessary. I willingly concede that in this respect not a few of the adherents of the Wolffian philosophy turn aside in some measure from the truth in maintaining that what is affirmed through a chain of reasons hypothetically determining one another is in a sense somewhat removed from complete necessity, because it lacks absolute necessity. In this matter I agree with their renowned antagonists that the distinction, which everyone recognises, mitigates but little the force of necessity and the certitude of determination. For just as nothing can be conceived to be *truer* than *the true*, and nothing *more certain* than *the certain*, so nothing can be conceived to be *more determined* than *the determined*. The world's events are determined so certainly that the divine prescience, which cannot be deceived, beholds, conformably to a nexus of grounds, and with equal certainty, both the future of things and the impossibility of the opposite, as if the opposite were excluded by the absolute conceiving of them. Here the question hinges not upon *to what extent*, but upon *whence* the determined futurity of contingent things is based. Who is there who would doubt that the act of creating the world is not uncertain in God, but was determined so certainly that the opposite would be unworthy of God, that is to say, is clearly not reconcilable with the nature of God? Yet the action is none the less free because it is determined by those grounds which, inasmuch as they certainly incline his will, include the motives of his own infinite intelligence, and do not proceed from some blind power of nature. So also in the free actions of men, so far as they are regarded as determined, the opposite is indeed excluded, but it is excluded not from reasons extraneous to the desires and spontaneous inclinations of the conscious subject, as if a man were compelled, so to speak, against his will by some inevitable necessity to the performance of deeds; but in the very inclining of the wishes and desires, so far as he willingly yields to the inducements of presentations, his actions are determined by a fixed law in a nexus which is indeed most certain and yet voluntary. The fact that a dividing line separates physical actions, and those which possess moral liberty, is constituted not by a difference of nexus and certitude, as if only those which labour under a doubtful future, and are exempt from grounds and connectedness of reasons, enjoyed a vague and uncertain mode of origin; for in such a case they would be little worthy of being regarded as the prerogatives of intelligent beings. But the fact that it is by their own reasons that their certitude is determined makes every instance stand

out as a record of the characteristic of liberty, for they are elicited only through motives of the intellect applied to the will, while, on the other hand, all animal or physico-mechanical actions are necessitated regularly by external solicitations and impulses without any spontaneous inclining of the will. Indeed, it is generally acknowledged that the power to perform an action evinces itself indifferently in either direction, but that only those things offered by presentations of what is pleasing as inducements are determined by inclination. The more firmly the nature of man is bound by this law the more surely does he rejoice in liberty, nor does being carried towards objects by a vague impulse in any direction constitute freedom. For no other reason does he act, you say, than because it thus pleased him most. Now I hold you bound by this confession of yours. For what is "being pleased" if not the inclining of the will, in accordance with the inducement exercised by the object, to this rather than to that? Your "it pleases", or "it is pleasant", signifies, therefore, an action determined by inner reasons. For "being pleased" determines an action on your view; it is, indeed, only the acquiescence of the will in an object in proportion to the ground of an inducement by which it inclines the will. Accordingly a determination is relative (*respectiva*) in which, if the will is affirmed to be attracted equally, but one of the two ways is the more pleasant, it is the same as that it pleases both equally and unequally, which involves repugnance. Yes, circumstances can happen where grounds which may incline the will to one or other course of action may readily escape consciousness, although one of them is none the less selected. Then, however, there has been a reversion from a higher to a lower faculty of mind and the mind is disposed in some sense towards the motive that has the superior weight (of which we shall make fuller mention in what follows) through one of the two ways of the obscure presentation.

In brief, if it be permissible, we may illustrate the well-known controversy by a dialogue between Caius, the defender of the liberty of indifference, and Titius, the supporter of a determining reason.

Caius. The course of my former life arouses in me remorse of conscience, but there remains this one solace, if credence is to be placed in your doctrines, that the blame for the deeds committed does not fall upon me. For since I have been bound by a nexus of grounds determining one another in turn even

from the beginning of the world, whatever I have done I could not resist doing, and whoever now reproaches me with my faults and fruitlessly urges that another mode of life should have been entered upon by me proceeds absurdly, no less so than if he were demanding that I ought to have stayed the flow of time.

Titius. Come now! What is this series of grounds by which you complain you have been bound? Whatever you have done, have you not done of your own free will? Has, then, the silent monition of conscience and the fear of God admonishing within clamoured falsely against you when you were about to sin? Did it do nothing but mock you when you were drinking, playing, making an offering to Venus, and other things of that kind? Were you ever, though unwilling, dragged into sin?

Caius. I do not in the least deny it. I honestly feel that without resisting and struggling strenuously against inclinations I was snatched away, as if by a twist of the neck, into a transverse direction. Consciously and with pleasure I yielded myself to vices. Whence did this inclining of the will to the baser part befall me? Before it happened, when indeed both divine and human laws appealed to me in their own ways while I hesitated, was it not already determined by a totality of grounds that I should follow the bad rather than the good course? If we posit a reason that is free from all restraints, would it not impede the determined being so as to make the deed void? Any inclination of my will is perfectly determined, in your view by a prior reason, and this again by a prior, and so on, even to the source of all things.

Titius. Let me now, however, remove your scruples. The series of implicated reasons has provided the inducing motives for an action in whatever limb you like to be performed; to one or other of these you have surrendered just because it was agreeable thus to act rather than otherwise. Now, you say, "it had already been determined by a totality of reasons that I should incline to a certain course". But I want you to consider whether for a complete ground of an action there is not required a spontaneous inclining of your will in accordance with the inducement of the object.

Caius. Beware of saying "spontaneous". It was impossible that it should not have inclined in that way.

Titius. But so far from disposing of spontaneity this even makes it more certain, provided it be understood in a right sense. For *spontaneity* is action proceeding from an *internal principle.*

When this action is determined in conformity with the presentation of the good it is what we call *liberty*. The more certainly anyone can be said to comply with this law, and therefore the more he is determined by all the assumed motives for willing, the freer the man is. It does not follow from your argument that liberty is impaired by dint of reasons determining antecedently. For the confession that you acted not involuntarily but in accordance with pleasure sufficiently contradicts you. Hence your action was not *inevitable* in the sense you would appear to imply, for you did not seek to avoid it, but it was *infallible* in accordance with the inclining of your impulse to the circumstances so constituted. And this verily brings home the greater blame to you. For you willed so resolutely, that you did not suffer yourself to be turned away from the project. But I will slay you with your weapon. Come now! In what way do you consider the notion of liberty could, more appropriately with your view, be formulated?

Caius. My view is this: If you can get rid of whatever there is of a concatenated network of grounds determining one another in a fixed order of occurrence; if you conceded that in any free action a man is in a condition of indifference towards each motive, and when all reasons whatsoever that you have imagined, which are in any way determining, have been affirmed, yet that he can choose any one instead of any other, then at length I would confess that the act is really performed with freedom.

Titius. Good gracious! If any deity allowed you to get this desire, you would be the unhappiest man of all time. Suppose you have decided in your mind to proceed along the path of virtue. Suppose your mind be already honourably sustained by the precepts of religion and by whatsoever other things are effective for the strengthening of counsel. Then an occasion of doing something occurs. Straightway you fall into what is ignoble, for no reasons which attract you determine you. I seem to hear you uttering still other complaints. "Ah, what sinister fate has suddenly driven me from wise counsel? What need is there of precepts in order to perform a deed of virtue? Actions take place by chance, they are not determined by reasons!" No, indeed, you say, I do not blame the unwelcome coercion of a certain fate snatching me away, but I detest that something I know not what which procures my lapse into what is base. O shame! Whence comes this impulse, detestable to me, towards the baser part, which could just as easily have led me into the opposite course?

Caius. But this might be said about every kind of freedom.

Titius. You see I have brought your arguments into a narrow compass. Do not invent spectres of ideas. For you feel yourself to be free; do not then concoct a notion of this liberty that is out of accord with right reason. To act freely is to act in conformity with one's impulse, and in truth in conformity with consciousness. And this verily is not excluded by the law of determining reason.

Caius. Although I have scarcely anything to urge in opposition to you, yet the inner meaning of your view seems to me to jar. For take a case of no great importance: if I observe myself, I notice that I am free to incline in either direction, so that I am sufficiently persuaded that the direction of my action was not determined by an antecedent series of reasons.

Titius. I will try to show you the tacit deception which occasions in you the illusion of a liberty of indifference. A natural impulsive power, resident in the human mind, is directed not only upon objects, but upon furnishing the intellect with presentations. Inasmuch, therefore, as we feel ourselves to be the originators of presentations which contain the motives of choice in a given situation, so that we are well able either to attend to them, or to suspend attention, or turn attention in another direction, and thus are conscious of being able not only to strive in conformity with our impulse towards objects, but also to change those self-same objective reasons variously at pleasure; so we can scarcely restrain ourselves from supposing that the working of our will is exempt from all law and free from fixed determination. But if we take pains to think correctly, we shall readily be convinced that there must certainly be present reasons determining why, in a given instance, the inclining of attention towards a combination of presentations is this and no other. Consequently, when reasons from one direction solicit our attention, to prove at once that we are at least free, we turn our attention in the opposite direction. And further, there must be reasons determining why the impulse is directed *thus and not otherwise.*

Caius. You have shown me, I confess, to be involved in many difficulties, but I am certain that you are embarrassed with scarcely fewer. How do you think that the determined future of evils, of which God is verily the ultimate and determining cause, can be reconciled with God's goodness and holiness?

Titius. That we may not fruitlessly spend time in useless discussions, I will briefly exhibit the uncertainties which hold

you in suspense, and untie the knot of your doubts. Since the certitude of all events, both physical events and free actions, is determined, the consequent by the antecedent, the antecedent by the still earlier preceding events, and so on by ever preceding grounds in a concatenated nexus until the first condition of the world which directly displays God as creator is as it were a fountain and gushing spring from which all things take their downward course by an infallible necessity, therefore you think God is to be designated unreservedly the inventor of evils. Nor does God seem to be able to eschew the web which he himself began, and which is woven conformably with his first mode of expression in the future periods of succeeding time, and pursues with as much indignation as is compatible with holiness the great moral evils interwoven in the work, if indeed the blame for all evils reverts at length upon the first contriver himself. These are the things which, being doubtful, oppress you. Let me dispel their shadows.

In undertaking the primordial affairs of the universe, God started a series which includes, in a fixed nexus of reasons bound together intimately and interconnectedly, even moral evils, and corresponding to these, physical evils. But it does not follow from this that God can be reproached as being the originator of morally perverse actions. If, as is the case in regard to mechanical things, intelligent beings were to hold themselves in a passive attitude towards those things which impel them to fixed determinations and changes, I do not deny that the ultimate blame for all these things must devolve upon God, as the designer of the machine. But the things which happen through the will of beings who are intelligent and endowed with the power of determining themselves of their own accord obviously proceed from an inner principle, from conscious impulses, and from the choice of one or another course of conduct according to freedom of judgment. Hence when the state of things in constituted in some manner prior to the occurrence of free acts, then howsoever that intelligent being may be enslaved in such a network of circumstances that it is absolutely certain that moral evils will result from it, and can foresee that that will be so, yet this future is determined by such reasons as that amongst them the voluntary direction of actions upon what is base is the central fact. And when what the sinners do greatly pleases them to do, it is perfectly consonant with equity that they ought to stand their trial and pay the penalty for their illicit pleasure. And, so far as concerns the

abhorrence which doubtless it is right that God should, owing to his holiness, feel for sins, but which seems to be scarcely consistent with the decree of the foundation of the world, which must have included these evils as happening in the future, even the difficulty which here besets the question is not insuperable.

Let us put it in this way: The infinite goodness of God aims at the greatest perfection of created things, so much as can be theirs, and the greatest happiness of the spiritual world. Surely with the same infinite endeavour to manifest himself he may not only have bestowed his labour on the more perfect series of events which afterwards might come into existence in the chain of reasons, but in order that nothing of good, even of a minor grade, might be lacking, and in order that the universe of things should in its immensity embrace all things from the highest grade of perfection which belongs to finite things to all inferior grades, and so to speak to nothing, he even allowed things to enter into his purview (*delineationem*) which, with the admixture of a great many evils, would yet supply something good which the wisdom of God should elicit therefrom, and thus differentiate the manifestation of the divine glory in its infinite variety. In this endeavour it was eminently befitting to his wisdom and power and goodness that there should not be wanting a record of the human race which, however mournful, would yet bear in itself numberless witnesses for proclaiming the divine goodness even in the self-same medley of evils. Nor in truth must he be thought to have intended and designedly to have evolved the evils thus interwoven in the work which he had begun. For he had in mind the good things which he knew if the grounds were withdrawn would not remain, and which it was unworthy of his highest wisdom to eradicate together with the unhappy tares. Besides, sin is committed by mortals by the voluntary and innermost state of the mind, the chain of antecedent reasons not urging and constraining them unwillingly, but inducing them; and although it was certainly to be foreseen that these inducements would be yielded to, yet since the origin of these evils is centred in an inner principle of self-determination, it is abundantly evident that it must be laid to the charge of the offenders themselves. And so it cannot be considered that the divine majesty shrinks the less from sins because by permitting them he has in a measure assented to them. For that very compensation consists in bringing back those addicted to evils for which there was licence to the better course by strenuous labour. And these compensations he strives to attain by advising,

warning, encouraging, supplying the means, and this is, rightly considered, the end which the divine artificer had in view. By these means, therefore, since he lops off and, so far as can be done consistently with the unimpaired liberty of man, frustrates the fruitful branches of evils, he has shown himself by his very act a hater of all depravity, while a lover of the perfections which can none the less be elicited from it.

But having wandered from the purpose of my undertaking somewhat further than is in keeping therewith, I return to the path.

Additions to Problem IX

There is no place for divine foreknowledge in respect of free actions unless the future be admitted to be determined by its own reasons.

Those who subscribe to our principle have always strongly urged this argument against those who impugn it. Consequently, while refraining from that undertaking, it will be sufficient to reply only to those arguments which Crusius, clear-sighted as he is, offers in support of the contrary. He charges those who think as I do with holding a view unworthy of God, inasmuch that they imagine God as making use of ratiocination. Indeed, if in this matter there are any who assert otherwise, I pass willingly to the side of the adversary. For I agree that a winding series of ratiocinations little becomes the greatness of a divine intellect. For there is no need, on the part of an infinite intelligence, for the abstraction of universal notions and for a combining of such notions, nor for a colligation made for eliciting consequences. But here we maintain that God cannot foresee those things the future of which is not determined antecedently, not for want of means, which we grant he does not need, but because it is impossible to have foreknowledge of a future which is obviously nothing if its existence is altogether and in itself and antecedently undetermined. For by its contingency it is inferred to be undetermined in and for itself; the opponents contend that it is equally undetermined antecedently; it is obviously, therefore, both in itself destitute of determination, i.e. of a future, and must be so represented by the divine intellect.

Then our esteemed adversary ingenuously avers that there is nothing incomprehensible here, but that when contemplation goes back to infinity, it is quite in keeping with the sublimity of its object (*obiecti eminentia*). But however much I may be

inclined to acknowledge that certain shrines of a more profound intelligence must remain never to be disclosed to human intellect, though you are prepared to descend into the innermost depths, yet the question here is not concerning the mode of existence, but whether the thing itself has a place, when to contemplate its repugnance with the view of the opposite course is to mortal cognition obviously quite easy.

Refutation of Instances which the Defenders of the Liberty of Indifference Call to Their Aid

The supporters of the opposing party instance things (as we may satisfy ourselves by their examples) which seem so plainly to testify to the indifference of the human will towards any free actions you may select, that it would appear that scarcely anything can be clearer. When the game "even or odd" is played, and beans hidden in the hand are to be won by guessing, we say one or the other indiscriminately and without any reason for our choice. Similar instances are brought forward as in the case of some prince who offered to someone the free choice of two caskets entirely similar in weight, figure, and form, one of which concealed lead, the other gold, where the determination to take hold of either could only be without a reason. They repeat similar things about the indifferent liberty of the right or left foot to move. I would reply to all such contentions in one word and, as it seems to me, sufficiently. Since according to our principle the question concerns determining reasons, it is not one or another kind of reason that is to be understood (e.g. in free actions reasons contrary to conscious intelligence), but whatever an action is determined by, it must be determined by some reason if the action is to be done. Objective reasons for the determining of will may of course be wanting, and there may be complete equilibrium of motives consciously presented, yet none the less there is still a place for very many reasons which can determine the mind. For by an ambiguous doubt of this sort it is only brought about that a thing lapses from a higher to a lower faculty, from a presentation united with consciousness to obscure presentations, in which it can hardly be discerned that everything on each side is perfectly identical. The reaching out of an inchoate desire towards ulterior perceptions does not permit the mind to stay long in the same state, and so when the state of inner presentations is varied, the mind must be inclined one way or another.

Proposition X.—To expound certain genuine corollaries of the principle of determining reason.

(1) *There is nothing in the rationatum that was not in the ratio.* For nothing is without a determining reason, and accordingly nothing is in the *rationatum* that does not evince its determining reason.

Objection may be made that since there are limits attaching to created things it follows that they are present likewise in God who contains their reason. I reply that the limits which attach to finite things evince likewise their limited reason in the act of divine creation. For the creative act of God is limited according to the mode of producing a limited thing. And since this act is a relative (*respectiva*) determination of God which must correspond to the things to be produced, and is not internal and absolutely intelligible in itself, it is clear that these limitations are not inherent in him.

(2) Of things which have nothing in common, one cannot be the ground of the other. This goes back to the preceding proposition.

(3) There is no more in the *rationatum* than there is in the *ratio.* This follows from the same rule.

Logical Inference.—The quantity of absolute reality in the world is not changed in the course of nature (*naturaliter*) either by augmentation or by decrease.

Elucidation.—The evidence for this rule is easily brought out in the case of the changes of bodies. If, for example, a body A propels a body B forward by percussion, a certain force (in consequence a reality)[1] is added to it. But an equal quantity of motion is abstracted from the impinging body. The whole of the force in the effect is, therefore, equal to the force of the cause. Now in the impact of a smaller elastic body upon a larger the alleged law appears to be fallacious. Yet this is by no means the case. For a smaller elastic body, thrust back by a greater against which it impedes, obtains a certain force urging it in the opposite direction, which, if added to that which it has transferred into the greater body, produces a total effect which is greater than the quantity of motion of the impinging body, as is certain from Mechanics. But that force which is here commonly called absolute would more truly be named relative (*respectiva*).

[1] Here, according to the common view, we may conceive it as a *vis impressa*, as it were, an imported reality—although, strictly speaking, it is only a certain limitation or direction of the reality that is inherent in it.

For these forces tend in diverse directions, and so are estimated from the effects which these mechanisms applied together produce, and as looked upon summarily as a whole are able to show; and the sum of the forces is ascertained by subtracting the motions in the contrary directions, and they will so far cancel each other that the motion of the centre of gravity remains, which, as is known from Statics, is the same after the impact as it was before it. So far as concerns the destruction of motion through the resistance of material, instead of this impairing the rule asserted, it rather strengthens it. For a force which, by a union of causes, emanated from rest is reduced again to rest by consuming, as a result of the resistance of impediments, just as much as it receives, and the fact remains as before. Hence also the inexhaustible perpetuity of mechanical movements is impossible, because if it spent always some part of its force in resistance in such a way that its power of recouping itself none the less remained undiminished, it would be equally opposed to this rule and to right reason.

We repeatedly see huge forces arise from an infinitely small causal principle. How great an expansive force a spark thrown into gunpowder produces! Or again, lodged in another place, in dry fuel, how many conflagrations, ruins of cities, and prolonged devastations of great forests it produces! And likewise how solid a structure of bodies the introduction of one tiny little spark dissolves! But here the efficient cause of immense forces which, while hidden, is maintained within, in the structure of the body, namely, in the elastic material either of the air as in gunpowder (according to the experiments of Hales), or of the fuel of a fire as in any combustible body, is more truly manifested than produced through the small instigation. The compressed elastic agencies are concealed within, and, when they are excited only a little, they thrust out forces proportional to the reciprocal struggle of attraction and repulsion.

Certainly the forces of souls and their persistent progression toward further perfection might seem to be exempt from this law. But, as I at least am persuaded, they too are bound by it. Without doubt the infinite perception of the whole universe, which is always internally present to mind, although extremely obscure, already contains within itself whatever reality must be in the cognitions afterwards to be suffused with more light, and the mind merely by turning attention afterwards to certain of these, while withdrawing an equal degree from others, and illuminating the former with intenser light, acquires greater

knowledge day by day. It certainly does not extend the circuit of absolute reality (for the material part of all ideas obtained from a connection with the universe remains the same), but the formal part, which consists in the combination of notions, and in the application of attention either to their diversity or to their agreement, is certainly changed in a variety of ways. We see the same kind of thing in the latent energy of bodies. For since movements, if they be rightly considered, are not realities but phenomena, and since latent energy, modified by the impact of an external body, resists the impact by its internal principle of efficiency with just as much force as it acquires in the direction of the impinging body, that which is real in the phenomenon of the movement of forces is equal to that which was already latent in the body at rest, although the internal power which in the stationary body was indeterminate with respect to direction is only directed by an external impulse.

The things which up to now have been alleged concerning the unalterable quantity of absolute reality in the universe ought to be understood as implying that all things happen according to the order of nature. For who is there who would venture to doubt that through the work of God what is defective in the perfection of the material world may be made good, that a purer light than is afforded by nature may be vouchsafed from heaven to intelligences, and that everything be brought to a higher pitch of perfection?

Proposition XI.—To adduce and refute certain spurious corollaries which have been deduced illegitimately from the principle of determining reason.

(1) That nothing is without a *rationatum*, or whatever is has its consequence. This is called the principle of the consequent, and, so far as I know, its author was Baumgarten, a giant among metaphysicians. But this principle, since it rests upon the same argument as that by which the principle of reason is demonstrated, falls in like manner to the ground. If it be a question merely of reasons of knowing, its truth is secure. For the notion of anything is either general or individual. If the former, those truths which follow from a generic notion must be conceded to be compatible (*competere*) with all lower truths embraced under it, hence to contain the reason of those truths. If the latter, those predicates which in a certain combination coincide with the subject must, we may conclude, always coincide with the same asserted reasons, and in the present case the notion

determines the truth in similar cases, and hence has *rationata cognoscendi*. But if we understand here *rationata exsistendi*, it will appear from the last section of this treatise that there are not entities productive of these *ad inf.*, for there we shall show by incontestable arguments that any substance which is cut off from connection with others is incapable of any change.

(2) Of things in the whole universe nothing is wholly like any other thing. This is called the principle of indiscernibles which, taken in the broadest sense as is usual, is as far as possible from the truth. It is usually proved by a twofold method. The first mode of argument leaps headlong over the object with a light spring, and therefore scarcely deserves to be taken into account. These are the cunning movements: Whatever things agree perfectly in all characteristics, and are not recognised as different by any distinction, must be taken to be one and the same thing. Hence all perfectly similar things are nothing but one and the same thing to which are assigned various places, a view which, it is contended, is opposed to right reason, and is at war with itself. But who is there who does not perceive the deception of the sleight of hand? Perfect identity of two things requires identity of all marks or determinations both internal and external. From this complete determination who will except place? However the internal characteristics of things may agree, if those things are distinguishable in respect of place they are not identical. It is, however, rather the argument falsely held to be grounded on the principle of *sufficient reason* that we are here chiefly concerned to refute.

It is repeatedly urged there subsists no reason why God should have assigned different places to two substances if they agree perfectly in all other respects. What absurdities! I marvel that really serious men find satisfaction in these toys of reasons. Call one substance A, another B. Let A occupy the place of B; then because A obviously does not differ from B in internal characteristics, if likewise it occupies the place of B it will be in all respects identical with B, and what was previously called A will now have to be called B. And, indeed, that which was first called B, now being carried over into the place of A, must be called A. For this difference of characters denotes only the difference of places. I ask, then, will God have done anything different if he has determined the places in accordance with your view? Each is perfectly the same, and so, on the view in question, change is nothing; but that nothing can be the reason of nothing accords very well with my view.

This spurious law is admirably refuted by the whole universe of things, and also by the fitness of the divine wisdom. For that bodies which are said to be similar, water, quicksilver, gold, the simplest salts, etc., should agree perfectly as to their homogeneous and internal characteristics in their elementary parts, is both suitable to their identity of use and function, for the upholding of which they are designed, and which may be seen from the effects which, being always alike, we apprehend as originating from the same things without any appreciable difference. Nor is it seemly to suspect the existence here of some hidden and imperceptible diversity, as though God has something by which he himself distinguishes the parts of his work. For that would be to find a difficulty where there is none.[1]

We grant that Leibniz, the author of this principle, pointed out a striking diversity constantly present in the fabric of organic bodies, and in the texture of others most remote from simplicity, and that he could rightly assume it in all things of that kind. For where it is necessary that many factors should harmonise together for the composition of anything, it is evident that equal determinations cannot always result. Thus you will hardly find a perfectly exact likeness among the leaves of one and the same tree. But here I am rejecting only the metaphysical universality of this principle. Besides, it scarcely seems disputable that identity of pattern is often found in the forms of natural bodies. Who is there who would be so bold as to contend that in crystallisations, for example, among infinite diversity there may not be found one or another copying something else with perfect similarity?

[1] Lit., "To find knots in a bulrush."—[Tr.].

SECTION III

DISCLOSING TWO PRINCIPLES OF METAPHYSICAL KNOWLEDGE, MOST FRUITFUL OF INFERENCES, FOLLOWING FROM THE PRINCIPLE OF DETERMINING REASON

1. The Principle of Succession

Proposition XII.—No change can happen to substances except in so far as they are connected with others, their reciprocal dependence determining the mutual change of state.

Hence a simple substance cut off from all external connection and left therefore to itself in isolation is *per se* obviously unchangeable.

Further, even when a substance is included in a network with others, if this relation be not changed, no change even of its internal state can take place in it. Consequently in a world destitute of all motion (for motion is the phenomenon of a change of connection) absolutely no succession will be found even in the internal state of substances.

Hence when the nexus of substances is wholly destroyed, succession and time in like manner fall to the ground.

Demonstration.—Let some simple substance exist in isolation, apart from connection with others. I say that no change of its internal state can occur. For since those internal determinations of the substance which are already compatible (*competunt*) are posited by internal grounds, with the exclusion of the opposite, if you want another determination to succeed, another ground must be affirmed by you. But inasmuch as the opposite ground must be inherent in the substance, and by supposition no external ground is added, it is obvious that a ground for the change can find no place in the substance.

Another Proof.—Whatever things are posited by a determining reason, these things must be posited at the same time with the reason; for when a determining reason is posited, it is absurd that the *rationatum* should not be posited. Whatever, therefore, be the determinations in any state of a simple substance, with these absolutely all the *determinata* must at the same time coexist. Because in truth change is a succession of determinations, or an occurrence in which some determination arises which

previously did not arise, and so a thing is so far determined in opposition to a certain determination which inheres in it. This change cannot take place through means of those factors which are found intrinsically in the substance. If, therefore, it happens, it must spring from an external connection.

Another Somewhat Different Proof.—Let a change arise under known conditions; because it begins to exist when previously it was not, i.e. when the substance was determined in a contrary manner, and there is not to be assumed to enter it anything that would determine it from any other source than an internal source, for the same reasons by which a substance is held to be determined in a certain way it will be determined in a contrary way, which is absurd.

Elucidation.—Those who give to the Woffian philosophy its name have been so oblivious to this truth, although it is sustained by a quite easy and impregnable chain of reasons, that they rather contend that a simple substance is subject to continuous changes from an internal principle of activity. I am well acquainted with their arguments; but that they are trivial I am hardly less certain. For when they give an arbitrary definition of force of such a kind that it signifies that which contains the ground of the *changes*, when it ought rather to be considered as containing the ground of the *determinations*, it was certainly easy for them to fall into error. Further, if anyone wished to know in what way the mutations, the interchange of which is found in the universe, arise, since they do not follow from the internal parts of any substance considered in isolation, I should like him to turn his mind to those facts which result through the connection of things, i.e. through mutual dependence in their determinations. But, since to explain these facts more fully here would take us somewhat farther afield than the limits of this essay allow, it will be sufficient to lay down by way of proof that the matter simply cannot be otherwise than we have stated.

Application.—(1) I find that the real existence of bodies, which, in contrast with the idealists, a saner philosophy has been able even to this day to regard in no other way than that of probability, follows with conspicuous clearness from the assertion of our principles. The mind, namely, is subject (through means of internal sense) to internal changes; since these changes cannot, in the light of what has been shown, arise from its own nature

considered in isolation and apart from a connection with other things, those other things must be present outside the mind, and the mind must be connected with them in a mutual relation. Moreover, it is equally apparent from the same considerations that change of perceptions takes place in conformity with external motion, and since it follows that we should not have a variously determinable presentation of a certain body unless it were truly present, and its intercourse with the mind induced a presentation corresponding to itself, it must be concluded that a *compositum* is given which we call our body.

(2) It completely overthrows the Leibnizian pre-established harmony, not as it is generally done through final causes, which are thought to be ill-befitting to God, and which not infrequently are of doubtful value, but rather by the inherent impossibility of the theory itself. For it follows immediately from what we have proved that a human mind apart from a real nexus of external things would obviously be incapable of any change of internal state.

(3) A considerable amount of certainty thence accrues to the view which assigns to absolutely every finite soul a certain bodily organism.

(4) It deduces the immutable essence of God not from a reason of knowing, which is drawn from his infinite nature, but from a genuine principle of his nature. For it is plainly evident from what we have said that a supreme deity absolutely free from all dependence, since those determinations which emanate from him are obviously fixed in no external way, would be wholly devoid of change of state.

Scholium.—Perhaps it may have seemed to some that the adduced principle is liable to suspicion on account of the indissoluble connection in which the human mind is in this way dependent upon matter for the performance of the internal functions of knowledge, a view which seems not far remote from the pernicious doctrine of the materialists. But I do not thus remove the mind's state of presentation, although I should aver that it would be immutable and continually like itself if it were wholly exempt from external connection. And should anyone perchance attempt to provoke a controversy with me, I would refer to the writings of those moderns who maintain with perfect agreement, as if with one voice, the necessity of the connection of the mind with some bodily organism. Of these, to mention one witness, I cite Crusius. I notice that he is so completely in

accord with my view that he explicitly asserts that the mind is bound by this law, that striving (*conatus*) in presentations is always conjoined with a striving of the bodily substance toward some external motion, to such an extent that when the one is beset with obstacles the other is also impeded. But although he does not think this law is so necessary that it cannot be relaxed if God wills, yet since he concedes that his own nature is bound by it, it would have to be acknowledged by him that it also would have to be trans-created, if the law be relaxed.

II. The Principle of Co-existence

Proposition XIII.—Finite substances, through their existence alone, are in no relations, and are evidently held in no intercourse (*commercium*) except in so far as having been predisposed to mutual relations they are maintained by the common principle of their existence, viz. by the divine intellect.

Demonstration.—Single substances, of which neither is the cause of the existence of the other, have an existence which is separate, i.e. quite intelligible without all others. When, therefore, the existence *simpliciter* of anything is affirmed, there will be nothing in it which will point to the existence of other things different from itself. Indeed, since relation is a relative (*respectiva*) determination, i.e. not intelligible in a being considered absolutely, the relation, and likewise its determining reason, cannot be understood through means of the existence of a substance whose existence is affirmed in it. If, then, nothing over and above this were added, there would be no relation among substances, and obviously no intercourse. Since, therefore, so far as particular substances have an existence independent of others, there is no place for their mutual connection, at least it does not in truth fall to finite things that they should be the causes of other substances. Yet none the less all things are found conjoined in a universal mutual connection. It must be confessed that this relation depends upon a community of cause, namely upon God, as the general principle of existence. And since the mutual reciprocity between these things does not follow from the fact that God has fixed their existence *simpliciter*, unless the same *schema* of the divine intellect which gives them existence has fixed their reciprocities by conceiving their existences as correlated, it is evident that the general intercourse of things is secured by the mere conceiving of the divine idea.

Elucidation.—It seems to me that I am the first to have laid it down on the clearest grounds that the co-existence of the substances of the universe does not suffice for establishing a connection between them, but requires in addition some community of origin and harmonious dependence upon it. For, to resume for a little the nerve of the proof, if a substance A exists, and there further exists B, then this B can be considered to posit nothing in A. For let it determine something in A, i.e. let it contain the reason of a determination C. Since this is a certain *relative* (*relativum*) predicate, not intelligible unless besides B there is present A, a substance B through those facts which are the ground of C will presuppose the existence of the substance A. For, indeed, if a substance B alone existed, through its existence it would remain obviously indeterminate whether anything A must exist or not; from B's existence alone it cannot be known that it posits something in other things different from itself. Hence there is no relation, and obviously no reciprocal action. If, now, in addition to the substance A God created others, B, D, E, *in infinitum*, still from the given existence of these their mutual dependence in determinations does not forthwith follow. For because in addition to A there exist also B, D, E, and let A be determined in any way whatever in itself, it does not follow that B, D, E would have determinations of existence conformably with this A. And thus in virtue of common dependence upon God there must be present a ground of mutual dependence among these entities themselves. And in what way this is effected it is easy to understand. The *schema* of the divine intelligence, the source of existents, is an enduring act (generally called conservation), and if in that act any substances were conceived by God as in isolation and without relation of determination, no connection and no mutual reciprocity between them would arise. But if they be conceived as relatively (*respectiva*) dependent on God's intelligence, then in conformity with this idea, and in their continued existence, their determinations are always reciprocal in relation to one another; that is to say, they act and react, and all particular things have a certain external state which, if you discarded this principle, could through their existence alone be nothing.

Application.—(1) Since position, situation, space, are relations of substances by which, through mutual determinations, they have reference to other substances actually distinct from themselves, and in this way are held together in external connection;

since, further, it has become clear through our proof that the existence alone of substances does not *per se* involve a connection with others; it is evident, that if you posit the existence of several substances, you do not thereby at the same time determine their position and situation, and, what is bound up with these complete relations, space. But because a mutual connection of substances requires a *delineatio* of the divine intellect expressed relatively in effective presentation—but this presentation is plainly arbitrary so far as God is concerned, and can equally be admitted or not admitted according to his good pleasure—it follows that substances could exist by this law, *that are in no position*, and obviously, in respect of our universe of things, in no relation.

(2) Since there can be many such substances according to divine pleasure, apart from the connections of our universe, substances which are none the less conjoined in a certain connection of determinations, and hence characterised by position, situation, and space, these will compose a world removed from the sphere of that of which we are parts—that is to say, a world standing alone. And thus it is scarcely nonsensical to hold that there may be possible several worlds at least in a metaphysical sense, if such were the will of God.

(3) Since, therefore, the existence *simpliciter* of substances is plainly insufficient for mutual connection and reciprocity of determination, and so from an external connection we argue to a common cause of all, in which their existence is fashioned relatively (*respectiva*), and since without this community of principle a universal connection cannot be conceived, there is derived from this the clearest proof of a supreme cause of all things, that is God, and this proof seems to me to be far superior to the proof from contingency.

(4) The irrational view of the Manichæans, who set over the government of the world two principles equally primary and scarcely dependent upon each other, is also completely refuted by our principle. For a substance cannot be in reciprocal relation with the things of the universe unless there be either a common ground on which they depend, or unless it has proceeded from the same cause as they. If, therefore, you were to say that one or the other of these principles is the cause of all the substances, the other could in no way determine anything in them. And were you to say that one or the other principle is the cause of some substances at least, then these could not have any intercourse with the rest. Accordingly, you must admit, either that

one of these principles is dependent upon the other, or that both depend upon a common ground, both of which suppositions contradict the hypothesis.

(5) Further, since the determinations of substances are mutually reciprocal, that is, substances different from one another act reciprocally (seeing that one determines certain factors in the other), the notion of space is freed from the intricate activities of substances with which reaction must always be associated. Of this universal action and reaction through all the realms of space, in which bodies have reference one to another, if the external phenomenon be their mutual approach, it is called *attraction*, which, since it is effected by compresence alone, extends to whatever distances you will, and is *Newtonian attraction* or universal gravitation. It is probable, therefore, that this attraction is effected by the same connection of substances as that by which they determine space, and that it is the most primitive law of nature to which matter is subject, which continuously operates only because God is its immediate support, as, indeed, is the view of those who call themselves followers of Newton.

(6) Since there is mutual intercourse between all substances in so far as they are contained in the same space, and hence mutual dependence so far as determinations are concerned, the universal action of souls on bodies and bodies on souls can be understood. But seeing that any substance has the power of determining others different from itself (as shown), not through those factors which inhere in it internally, but only in virtue of a connection in which they are held in the idea of an infinite being, whatever determinations and mutations are found in any substances are always in truth externally reciprocal, and an *influxus physicus* properly so called is excluded, there being a universal *harmony* of things. Yet there does not result from this the Leibnizian *pre-established* harmony which introduces strictly *agreement*, and not mutual *dependence* among substances. For God does not use the craftsmen's tools adapted in a series of arranged causes for procuring the agreement of substances, neither is there a special ever-present influx of God, i.e. an intercourse of substances by means of the *occasional causes* of Malebranche at work here. For the same particular action which confers existence upon substances and keeps them in existence, so procures their mutual and universal dependence, that there is no need for the divine act to be determined this way or that according to circumstances; but there is a real action of substances mutually among themselves, or an intercourse through really efficient

causes, because the same principle that fixed the existence of things maintains them as bound to this law, and thus a mutual intercourse is established through those determinations which appertain to the origin of their existence. External changes can therefore be said to be produced by efficient causes in the same way as those which take place within are ascribed to the force of internal agencies, although the natural efficacy of the latter rests no less than the security of external relations upon the divine upholding. At any rate, the system of universal intercourse of substances so expressed is certainly a good deal more correct than the common theory of *influxus physicus*, because it discloses the very origin of the mutual connection of things, an origin which must be sought outside the principle of substances considered in isolation, in which respect the well-known system of efficient causes has deviated considerably from the truth.

Scholium.—See, then, kind reader, the two principles of abstract metaphysical knowledge, by the aid of which we may possess, in the realm of truth, an admirable insight. And if this science be skilfully pursued in this way, its soil will not be found so sterile, and the reproach of otiose and shadowy subtlety with which it is charged by those people who disparage it will be confuted by an ample harvest of nobler truth. There are, of course, those who, being keen hunters of illegitimate consequences in certain writings, are skilled in eliciting always a sort of poison from the teachings of others. Although I have not denied that these people may perhaps twist some things in these writings of mine into a bad sense, nevertheless I think it is my duty, while allowing them to abide in their own opinion, not to take heed of what anyone may perchance judge falsely, but to proceed in the straight path of investigation and speculation; and in this endeavour I ask that those who are kindly disposed toward unfettered inquiry may favour me with such consideration as is meet.

BIBLIOGRAPHY

UNFAMILIAR WORKS REFERRED TO IN THE *NOVA DELUCIDATIO*

BAUMGARTEN, A. G. *Metaphysica*, 1739.

BOERHAAVE, H. *Elemente Chimiæ*, 1732.

CRUSIUS, C. A. *Dissertatio de usu et limitibus principii rationis determinantis vulgo sufficientis*, 1743.

Weg zur Gewissheit und Zuverlässigkeit der menschlichen Erkenntniss, 1747.

Entwurf der notwendigen Vernunftwahrheiten, 1753.

DARIES, J. G. D. *Elementa Metaphysica*, 1743.

HALES, S. *Attempt to Analyse the Air*, 1727.

MALEBRANCHE, N. *De la Recherche de la Vérité*, 1678.

WOLFF, C. *Philosophia prima sive Ontologia*, 1736.

INDEX

Absolute, 187 ff., 208
Adamson, R., 112
Adickes, E., 113 n., 134, 199 f.
Æsthetic judgments, 145
Alexander, S., 164 n.
Anselm, 123 f.
Anthropomorphism, 157, 166, 193 f.
Aristotle, 27 n., 139 n.
Arnoldt, 73 n.
Augustine, 21, 23 f., 29, 124 n.

Balfour, A. J., 166 n., 193 n.
Baumgarten, 33 n., 46 f., 51 n., 52 n., 58, 68 n., 122 n., 227, 242
Bayle, 31 n.
Beck, J. S., 148 n.
Bewusstsein überhaupt, 96, 108, 202
Blumenbach, 146 n.
Boerhaave, 217
Bosanquet, B., 190 n.
Bouchitté, 124 n.
Bourguet, 31 n.
Bradley, F. H., 86, 165, 189
Broad, C. D., 162 f.
Butler, 166

Cantor, 88
Causa, efficiens et finalis, 146, 153
Causa, eminens et formalis, 23
Causality, 22 f., 25 f., 32 ff., 37 ff., 57, 61, 70 ff., 92, 105 ff., 109, 111 ff., 129 ff., 136 ff., 145 ff., 152 ff., 169 ff., 198 n., 241, 248, 250 ff.
Cause, first, 30, 53, 56 f., 131 ff., 136 ff., 230
Chrysippus, 229
Clarke, 28
Cohen, 172 f.
Cosmological argument, 53, 55 f., 131 ff., 196 n.
Couturat, 88 n.
Creation, 23, 29, 57 ff., 68, 187, 229, 231, 236, 238, 240
Crusius, C. A., 36 ff., 44 ff., 63, 70, 79, 222, 226, 228, 247

Daries, 218, 228
Dedekind, 88
Descartes, R., 21 ff., 29 n., 31, 53, 55, 63, 92, 106, 187, 221, 224 f.
Dieterich, 164 n.
Double affection theory, 107 n.
Driesch, H., 146 n.

Ens realissimum, 23, 55, 120 ff., 133 ff., 139 ff.
Erdmann, B., 7, 55 n., 73 n., 107 n., 117, 148 n.
Ernst, 147 n.
Euler, 75 n.
Ewing, A. C., 152 n.

Fichte, 107 n.
Fischer, Kuno, 107 n.
Frege, 88 n.

Galloway, G., 166 n.
Garve, 73 n., 176 n.
Gassendi, 124 n.
Gaunilo, 123
Green, T. H., 113 n.

Hales, 241
Hamaan, 73 n.
Hegel, 151 n., 188 f.
Henderson, L. J., 163 n.
Herder, 73 n.
Herz, M., 77 ff.
Heuristic principles, 6, 132 f., 155, 158, 161, 198, 200
Hicks, G. Dawes, 103 n., 104, 109 n., 115 n., 182, 189 n.
Hobbes, 124 n.
Huet, 124 n.
Hume, D., 73 n., 92, 101, 103, 105, 157, 160 ff., 166

Inner sense, 65, 114
Intuitive understanding, 74, 150 ff., 159, 188 ff., 209, 248 f.

Jachmann, 54 n.
Jäsche, 66

Knutzen, M., 63 f.
Krause, 107 n.

Lambert, 73 n., 75, 77
Leibniz, G. F., 5, 26 ff., 32 ff., 39, 42–3 45, 56, 59 n., 60 f., 73 n., 75, 92, 102, 185, 187, 194 f., 217, 244, 251
Lewes, G. H., 103
Locke, J., 124
Lotze, 110

MacTaggart, 68 n.
Maimon, 107 n.
Malebranche, 23 f., 67, 77, 79, 251
Manicheans, 250
Marburg School, 107 n.
Martineau, J., 166 n., 193 n.
Meier, G. F., 65 f.
Mendelssohn, 145 n.
Mill, J. S., 101
Morgan Lloyd, 164

Nature, 100 f., 113, 143 f., 153, 198
Newton, I., 251
Nietzsche, 200
Noumena, 77, 113 n., 114 ff., 135 f. 138 ff., 158, 169 ff., 177, 186, 188, 196 n., 204, 207 f.

Ontological argument, 53 ff., 123 ff., 140, 194 ff.
Opposition, real and logical, 69, 120
Opus postumum, 113 n., 154 n., 179 f., 192 n., 199 f., 205 n.
Organisms, 146 ff., 152 ff., 161 ff., 244, 247

Paulsen, 73 n., 77 n., 107 n.
Personality, 6, 183, 191 ff.
Pfannkuche, 147 n.
Phenomenalism, 5, 104 ff.
Plato, 110
Plotinus, 137
Pölitz, 206 n., 207 n.
Positing, absolute and relative, 49, 54, 229
Possibility, 29 ff., 42 ff., 76, 119 ff., 185, 224 f.
Pritchard, H. A., 106 n.
Proclus, 138 n.

Reflexionen, 7, 54, 72, 73 n., 75 n., 76 n., 77 n., 79 n., 117, 136 n.
Reicke, 7, 113 n., 179 n., 180 n., 199 n., 200 n.
Reinhold, 145 n.
Res, 51 f., 56
Riehl, 98 n., 107 n.
Russell, B., 69 n., 88 n., 181 ff.

Schiller, 145 n.
Schiller, F. C. S., 193 n.
Schopenhauer, 205
Schulze, 107 n.
Smith, N. Kemp, 95 n., 96, 107 n., 115 f., 134 n.
Space, 75 ff., 140, 249 ff.
Spencer, H., 103
Spinoza, 5, 24 ff., 56 f., 60 ff., 187 f.
Stadler, 148 n.
Stout, 109
Subjectivism, 5, 75, 83, 101 ff., 109, 131, 153
Succession, objective and subjective, 104 f.

Teleological argument, 156 ff.
Teleology, 144 ff., 160 ff., 183
Tetens, 145 n.
Thiele, 71 n.
Time, 26, 56, 75 ff., 97, 100, 140, 185 ff.
Timelessness, 22 f., 25, 93, 97, 171 ff., 183, 185 ff., 192
Truth and existence, 109 f.
Truths of reason and of fact, 27 ff.

Vaihinger, H., 73 n., 107 n., 200
Values, 165, 183
Varisco, B., 165

Ward, J., 54 n., 71 n., 193
Weymann, 70 n., 71 n.
Whitehead, A. N., 167 n., 186 n.
Windelband, 73 n.
Wolff, 5, 6, 32 ff., 38 f., 44 ff., 48, 51 n., 52 n., 53 n., 55 f., 60, 70, 92, 120, 122 n., 145 n., 180, 204 f., 221, 227, 231, 246
Wundt, 164