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## Immanuel Kant (1724-1804)

Kant has been regarded as the most important modern philosopher. In him meet the cross currents of modern philosophy and then again pass out many more tendencies in the contemporary thought. Kant was not only a philosopher but also was essentially a moralist, a theologian and a natural scientist. In him the German thought with its characteristics of thoroughness, profundity and obscure terminology began to show themselves.

### 8.01. Introduction

Kant began his philosophical career as a rationalist of the Wolffian school, but he soon saw its inadequacy. According to it, we can begin with innate ideas, but how can we say that they are also true of the external world? Like spiders we cannot weave out fancies and regard them to be valid of the real world. After rejecting rationalism as a natural scientist, he began to look upon experience to explain knowledge. However, he was roused from his dogmatic slumber by the sceptical writings of Hume. Thus he was dissatisfied with both rationalism and empiricism. For the time being he tried to take refuge in *Nouveaux Essais* of Leibnitz. But the whole system of Leibnitz was based on the doctrine of the pre-established harmony, which is only an uncritical assumption, incapable of supporting a scientific system.

In this hopeless state of philosophical progress a lesser man would have succumbed to despair. But Kant believed in the validity of scientific knowledge and his faith in moral goodness never failed to enkindle his spirits. His problem, therefore, was to find out the conditions which would make knowledge possible. There is knowledge, according to Kant, in Mathematics and Physics and if this cannot be explained by rationalism or empiricism then so much worse for the theories. The failure of empiricism and rationalism should open a new avenue of approach to the understanding of knowledge. Kant attributes the failure of metaphysics to the uncritical use of reason itself. Before we trust ourselves to the guidance of reason, we should examine its nature, limit and competence. Thus in general the problem of Kant is the same as that of Locke, namely, "If, by this inquiry into the nature of the understanding I can discover the powers thereof; how far they reach, to what things they are in any degree proportionate, and where they

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fail us; I suppose it may be of use to prevail with the busy mind of man, to be more cautious in meddling with things exceeding its comprehension, to stop when it is at the utmost extent of its tether; and to sit down in a quite ignorance of those things, which, upon examination, are found to be beyond reach of our capacities." (*Essay-I*, 1,2,4)

### 8.02. Kant's Problem and its Solution

Like other moderners, viz., Descartes and Locke, Kant answered that knowledge means certain knowledge. Such knowledge according to him, is found in mathematics and physics. Both of these sciences were making good progress. So scepticism appeared to him to be unwarranted. If, therefore, empiricism and rationalism had failed to explain knowledge, then their failure would not be reflecting any actual state of affairs in the world of science. Their failure would be entirely the consequence of their improper analysis of knowledge.

*The failure of empiricism*—Kant agreed with Hume and the preceding classical empiricists in holding that the manifold of sense-data or the sense-impressions are passing events. However, knowledge proper is obtained by ordering, connecting and synthesizing them into some system. Ordinarily, we systematise the discrete sensory data with the help of the categories of substance, causality etc. However, following the hints of scepticism concerning 'substance' made by Locke and Berkeley, Hume had come to the conclusion that there could be no intelligible account of substance, either material or spiritual. In the long run, the notion of substance, according to Hume, was an idle figment of imagination and of the association of ideas. In the same strain, Hume demonstrated that no intelligible account of universality and necessity involved in causality would be given on the basis of 'impressions and their ideas'. Like substance, therefore, 'causality' according to Hume, was a figment of imagination. Now if substance and causality, not to speak of other lesser categories, were mere fictions, and then certainly there could be no intelligible way in which the discrete and passing manifold of sense-impressions could be ordered. Without the order, there could be no knowledge. Therefore, scepticism is a necessary outcome of classical empiricism, according to Kant.

Again, as noted earlier,<sup>1</sup> on the basis of experience, strict universality and necessity cannot be obtained. So empiricism can never guarantee universal and necessary elements in empirical propositions. And, for Kant, knowledge proper must have universal and necessary factors along with factuality. So, on the very face of it, according to Kant, empiricism cannot explain knowledge as is found in mathematics and physics.

*The failure of rationalism*—According to rationalism there is a universal faculty of reason by virtue of which each individual has certain *innate ideas*.

1. Supra § 0.09, p. 23.

Knowledge proper, according to it, is exclusively constituted of such ideas. This theory successfully explains universality and necessity, according to Kant. All men have the same innate ideas because of their possessing a common faculty of reason. Naturally, being constituted of them cognitive proposition must be the same for all men. Again, all persons cannot but perceive the truth as their rational faculty directs them. Hence, cognitive propositions constituted by innate ideas must be necessary as a result of inner compulsion or constraint.

But the difficulty of rationalism lies in another direction. Innate ideas are subjective, being in the mind of human knowers. What is the guarantee that they will also be true of facts? Here Descartes and Leibnitz take recourse to *deus ex machina*. According to Descartes, God's veracity is the ultimate guarantee for the factual truth of *clear and distinct* ideas. Quite obviously, clear and distinct ideas by themselves do not explain their factual guarantee. This is most patent with regard to Descartes' explanation of our knowledge of the external world. But if clearness and distinctness of ideas by themselves cannot explain factual propositions, then the magic term 'God' cannot do this miracle. Similarly, according to Leibnitz, all ideas are innate. He has, therefore, to answer the question concerning their factuality. Here he takes recourse to the doctrine of *Pre-established Harmony*. According to Leibnitz, God has so created the monads that the order and development in one is reflected in those of all other monads. As such a thought of a table in a soul-monad called Ram is actually reflected in a bare monad called 'table'. But, how can Ram verify this correspondence? Obviously, he cannot, since being a windowless monad, he can never put himself outside his own cocoon-like monadic existence. Therefore, the doctrine of pre-established harmony is *a priori* assumption, which ordinarily cannot explain actual states of affairs. Hence, the doctrine of pre-established harmony remains an unverifiable and a fictional explanation of knowledge proper.

There is yet another difficulty of rationalism. Rationalism starts from certain clear and distinct concepts, and proceeds to other ideas systematically and gradually as a result of deductions from them. Thus, Descartes started with a definition of substance as that which is in itself and conceived through itself without depending on anything else for its existence. Of course, Descartes inconsistently enough had accepted the reality of mind and body as two relative substances. Spinoza tried to correct this inconsistency of Descartes. Spinoza through his rigorous logic concluded that there could be only one substance. Other things of our daily experience, including the thinker himself, according to Spinoza, are mere modes 'which never are'. As such plurality stands negated, and, yet this has to be included in any philosophy. Leibnitz saw this inconsistency of Spinoza. He, therefore, began with the plurality of monads. His difficulty lay in nor reaching any unity in plurality, to which reference has already been made.

Thus, rationalism has given rise to the two contrasted systems of Spinoza and Leibnitz. Both of them have the same starting point, namely, a self-evident

definition of substance as appeared to them. Yet their conclusions taken singly are highly unsatisfactory, and, taken together are mutually contradictory. The upshot of the review is that reason, unaided by experience, can build castle in the air only, and, by no stretch of imagination can it lay claim to actuality. Therefore, Kant rejected rationalism on the ground that it dealt with airy structures without correspondence with facts.

### 8.03. Copernican Revolution

According to Kant, empiricism and rationalism both had failed to explain knowledge because both of them were based on a common assumption concerning the status of objects. According to both of them, things as objects of knowledge exist external to the mind. The mind therefore, has to approach them in order to know them. But on this assumption concerning the status of objects, how can knowledge be explained?

If objects be external to mind, then we can know them only by having experience of them. On the basis of experience alone we can never be certain concerning the objects. All that we can say about them is that such objects are such and such, and, we can never say that these are *all* the objects which *must be* such and such. In other words, if objects be external to the human mind which it has to approach to know, then universal and necessary propositions concerning objects are not possible.

Seeing the failure of rationalism and empiricism concerning objects, one requires a bold step. This situation of philosophy reminded Kant of Ptolemy and Copernicus. Copernicus was faced with a complete stalemate in astronomy which was at that time based on Ptolemaic assumptions. Copernicus, therefore, by a bold thrust of thought effected a revolution in that branch of science. Instead of assuming the earth to be the centre, he assumed the sun to be the centre of the universe. With this complete reversal in the standpoint, astronomy since then has registered advance by leaps and bounds. A similar reversal in the ordinary standpoint concerning the status of objects would make philosophy progressive, according to Kant. Accordingly, Kant stated that instead of the mind approaching objects, we have to assume that the objects must approach the mind to be known at all. 'Reason must approach nature not as a pupil but as a judge.' We have to assume that the mind lays down the conditions for the objects to become objects for knowledge. Unless objects conform to these preconditions, they will not be objects for human knowing. Later on, we shall find that these preconditions for objects are the two forms of sensibility (space and time) and twelve categories of the understanding (substance, causality etc.). Suppose there are a number of holes of various shapes and sizes in a surface of a table. Similarly, suppose that there are a number of pebbles of various shapes and sizes. Let these pebbles roll down the surface. Only those pebbles will be caught up that fit into their holes.

In the same way the mind lays down the conditions for the objects to be known. Only those objects which fit into these conditions are known; those which do not fit, are not known at all.

Only on this basis of Copernican revolution regarding the status of objects in relation to the knowing process, we can explain knowledge. Because the conditions which the mind puts forth for objects are the common properties of all minds, therefore, all minds as knowers will view objects under these very conditions. This would explain uniformity and *universality* in cognitive propositions concerning any objects whatsoever. Besides, these conditions are not the conditions under which the mind knows objects, but are those conditions under which the mind as mind *must* know them. The mind cannot help seeing things but in accordance with its own native constitution. The most important thing for Kant, therefore, is to show that there are certain *a priori* forms as pre-conditions for knowing any objects. Without this the Copernican revolution which Kant sought to introduce in philosophy could have not been effected. Many critics of Kant have raised objections against the use of the terms 'Copernican revolution'. It is pointed out that instead of establishing a heliocentric standpoint, Kant has really tried to re-establish a Ptolemaic way of thinking. We shall find that it is a fact that Kant sought to show that the mind 'maketh nature' or is a law-giver to all objects. Thus instead of showing the unimportance of the earth and its dwellers (men), Kant has sought to enhance the worth of man. However, Kant, by the phrase 'Copernican revolution', is not seeking to emphasise the dethronement of man or to wound the Narcissism of man, as Freud termed it, but is simply emphasising a proposal for a revolution in human thinking as was done by Copernicus.

#### 8.04. The Critical, Transcendental and Agnostic Philosophy of Kant

*General solution:* Kant did not reject empiricism and rationalism outright. He tried to retain all that appeared to be valuable in them. His statement was that both empiricism and rationalism are right in what they *affirm*, but wrong in what they *deny*. Empiricism affirms that knowledge is constituted by experience, and, rationalism affirms that knowledge is constituted by innate or *a priori* ideas. Empiricism is right inasmuch as it points out that propositions of facts can be derived from experience. But rationalism is also right inasmuch as it points out that knowledge is constituted of *a priori* elements also. Again, empiricism is wrong inasmuch as it denies the presence of *a priori* elements involved in knowledge. In the same way, rationalism wrongly denies that sense-experience also constitutes knowledge. The proper view, according to Kant is "knowledge begins with experience, but does not necessarily originate from it." As soon as sense-experience registers its impressions on the mind, the mind at once is stirred into its own activity and contributes its own ordering activity into discrete impressions. The ordering activity is discharged by *a priori* elements. Knowledge

proper is a joint venture of *sense* and *understanding*. But we shall also find in due course that the mind does not remain satisfied with scientific knowledge of the phenomena only. It also tries to *know* the suprasensible, and, this is not possible. Apart from sense and understanding there is *reason* which uselessly tries to constitute knowledge. However, the *Ideas* of reason are not constitutive but regulative principles of knowledge. Hence, according to Kant, *knowledge begins with sense, proceeds thence to understanding and ends in reason*.

That a factual proposition is based on experience is quite obvious and Kant did accept this contention of the empiricist. However, that there are *a priori* or universal and necessary elements involved in any empirical knowledge is a crucial point raised by Kant. According to Kant, any epistemology should have occupied itself with the enquiry of *a priori* elements involved in knowledge. These elements are independent of any experience whatsoever. Nay, indeed they are the pre-conditions of any cognitive experience whatsoever. Unless these *a priori* elements be operative, no experience of any object would arise at all. So Kant is not so much concerned with any specific objects of knowledge as with the universal or *a priori* ways of knowing any object. Hence, Kant has called his epistemological enquiry *Transcendental*. "I entitle *transcendental* all knowledge which is occupied not so much with objects as with the mode of our knowledge of objects insofar as this mode of knowledge is to be possible *a priori*." There are three modes in which the mind proceeds for ordering any empirical knowledge. In the first instance, discrete sensations have to be organised into space and time to give rise to *percepts*. These percepts have to be organised further still by the twelve categories of the understanding in order to give rise to judgments. Percepts and concepts joined together yield empirical knowledge proper. A further process of synthesis is effected *a priori* by the three *ideas* of reason, namely, the world, soul and God. However, these ideas are regulative only and concerning them no knowledge is possible. This conclusion of Kant, concerning supersensible and metaphysical entities is known as Agnosticism.

Agnosticism is that branch of philosophy according to which it is claimed that human beings have no faculty for knowing certain ultimate realities. We know that they are, but we do know that they are. Kant maintains that there are things-in-themselves which are unknown and unknowable. This doctrine of the unknowable follows from his transcendental philosophy. According to the transcendental philosophy of Kant only those objects are known which lend themselves to human forms of knowing. Naturally objects of knowledge would be transfigured and transformed by these *a priori* forms of human knowing. Therefore, Kant maintains that we can know objects only as they appear to us, coloured and transformed by our ways of knowing. What these objects are in themselves apart from our ways of knowing, of course, can never be ascertained by us. Hence, according to Kant, knowledge of the phenomena alone is possible; *noumena* or the things-in-themselves remain unknown and unknowable. Later on,

Kant has maintained, although they are not objects of knowledge, they are yet proper objects of *faith*. After all he was a deeply religious man and so he demolished knowledge in order to make room for faith.

Kant's major works comprise three *critiques* of pure reason, practical reason and judgment. Hence, his philosophy is known as criticism, as opposed to dogmatism. *Dogmatism*, according to Kant, is the presumption that it is possible to make progress with pure knowledge from concepts alone, without having first investigated in what way and by what right reason has come into possession of these concepts. Dogmatism is thus an uncritical procedure in philosophy without previous criticism of human powers of knowing itself. Hence, according to Kant, both empiricism and rationalism were dogmatic systems. The empiricists dogmatically maintained that experience exclusively constituted knowledge, and, in the end fell into the scepticism of Hume. Similarly, the rationalist, with equal dogmatism held that innate ideas alone constituted knowledge. They too ultimately became the architects of many a world of thought without correspondence with reality. The dogmatist set no limit to knowledge, and, the sceptic set no limit to ignorance. Thus, the one-sided and exaggerated claims of dogmatic philosophers earned nothing but ridicule. However, before we trust ourselves to reason, prudence demands that we subject this organ of knowledge to the strictest possible scrutiny. 'It is a call of reason to undertake anew the most difficult to all its tasks, namely, that of self-knowledge, and to institute a tribunal which will assure to reason its lawful claims'. Religion on the ground of its sanctity and *Law* on the ground of its majesty cannot escape this criticism.

A critique of pure reason, according to Kant, is concerned with the faculty of reason in general, in respect of all knowledge after which it may strive *independently of all experience*. In other words, Kant's enquiry is transcendental in which he seeks to lay bare the *a priori* elements which the mind brings to bear upon knowing any objects whatsoever. A *critical philosophy*, in the sense of Kant, goes beyond any dogmatic systems insofar as it is an attempt to reach principles, which are prior not only to a particular controversy but to all controversy.<sup>1</sup> The enquiry of Kant is almost exclusively concerned with *a priori* contributions of mind. The subject of the present enquiry is the question, how much we can hope to achieve reason, when all the materials and assistance of experience are taken away.<sup>2</sup>

### 8.05. Relation of Criticism with Empiricism and Rationalism

Kant's philosophy is known as a reconciliation between empiricism and rationalism. The points of difference and similarity between them can be stated in the following manner:

1. Caird, E., *Critical Philosophy of Kant*, Vol. I. pp. 7-8.

2. N.K. Smith, *Immanuel Kant's Critique of Pure Reason*, p. 8.

#### Empiricism

1. The mind at birth, according to Empiricism, is a clean slate or a *tabula rasa*. All the characters of knowledge are inscribed on it by experience only. Thus knowledge begins with and ends in experience.

2. Empiricism over-estimates sense and under-estimates reason. The intellect, according to Locke, can function only after simple ideas have been supplied to it. Similarly, according to Hume, intellect cannot create one single simple idea of sense. The place of intellect is at most secondary.

3. Empiricism holds that sense and understanding differ in degree only. This is at least very clear in sensationalism according to which thinking is perceiving or imagining.

4. Empiricism holds that the data supplied by experience are discrete, distinct and unconnected. Any connection is introduced by the process of

#### Rationalism

- According to it, mind is active and creative. As soon as we begin to reflect, we become conscious of certain innate ideas. Knowledge is constituted exclusively of innate ideas.

- Real knowledge, according to rationalism, consists in clear and distinct ideas which are given by reason alone. Sense-experience can neither constitute knowledge nor can it ever confirm-disconfirm proposition given by reason. Sense provides only with an occasion for thinking about innate ideas.

- Rationalism too did not make any sharp distinction between sensing and thinking. According to Descartes, and clear ideas and clear perceptions (e.g. of the external world) have the same status. But it was Leibnitz who regarded the distinction between sensation and thought as of *degree only*.

- Rationalism starts with clear and distinct ideas and connects them with the help of logical rules. But innate ideas by themselves have no correspon-

Transcendentalism
Knowledge begins with experience but experience stirs mind to become creative as well. Hence, in knowledge sense-experience is at one moulded and transformed by the <i>a priori</i> elements contributed by the mind.
Knowledge proper is a joint product of sense and understanding. The material is supplied by the sense are ordered and synthesized into cognitive statements by the <i>a priori</i> from of the mind.
Kant makes a sharp distinction between sensing and thinking or understanding. Sensing is <i>passive</i> ; understanding is <i>active</i> or spontaneous. Sense supplies the matter and understanding connects the discrete data into judgments.
True, data by themselves are discrete. But the connection introduced into them by <i>a priori</i> forms is the same for all persons. Hence, though the

*association* and *imagination*. As these connecting processes are considered to be purely relative and subjective, so knowledge based on them is taken to be lacking in certainty.

5. Empiricism is dogmatic, for it is uncritically assumes the constitutive role of experience, without reference to *a priori* elements. In the end it sets no limit to ignorance which finally terminates in scepticism.

dence with facts. Therefore, knowledge, according to rationalism, becomes purely conceptual and airy nothing.

Rationalism is also dogmatic since it confines knowledge to innate ideas only, ignoring the claims of sense-experience. In the end, it terminates in the inconsistent systems of Spinoza and Leibnitz.

connection depends on the *subjective* constitution of the human mind, yet it is valid for all, for all human knowers have the same constitution. But of course, knowledge is confined to phenomena only.

Transcendentalism points out the importance of *a priori* elements in knowledge. However, it points out that without sense-materials, they alone cannot constitute knowledge. It successfully reconciles the rival claims of empiricism and rationalism and maintains a golden mean between the exaggerated scepticism and excessive claims of knowledge.

#### 8.06. The Problem of Synthetic Judgments *a priori*

Kant held that Hume and others went wrong simply because they did not analyse cognitive statements sufficiently enough. Since the time of Kant, it is now accepted that a good deal of successful solution depends on a precise and meaningful statement of the question. Kant, therefore, stated that knowledge for his always meant scientific knowledge, the clearest examples of which are found in mathematics and physics. An analysis of knowledge in mathematics and physics reveals that it consists of *synthetic judgments a priori*. Now this important phrase, in relation to which Kant's epistemology has been developed, requires very careful explanation.

A proposition is said to be *analytic* when its predicate is already contained in the connotation of the subject. For example, "All bodies are extended". If we understand the meaning of the term 'material body' whose connotation was taken by Descartes, Spinoza and Leibnitz to be *extension*, then certainly the predicate 'extended' is already contained in the subject. Parkinson<sup>1</sup> has stated Kant's containment-theory concerning analytic proposition thus: "To all *X* to which there

1. G.H.R. Parkinson, Mind 1960, July LXIX. p. 397.

belongs the concept body (*a + b*), there belongs also extension, (*b*)". So in spite of the unsatisfactoriness of the containment-theory, in relation to Leibnitzian formulation, Kant's statement is intelligible enough. Analytic propositions simple explicate the meaning of the terms involved and do not add anything to our knowledge. A *synthetic* proposition is one in which the predicate does not belong to the subject either as its parts or whole, e.g., 'Material bodies are heavy'. Whether a body is heavy or not is known through experience.

Again, a proposition is said to be *a priori* when it is independent of any experience whatever. *Necessity* and strict *universality* are the two criteria of *a priori* propositions and both of these criteria are inseparable. By 'strict universality' is meant 'true in all possible worlds'. *A posteriori* propositions are those which are possible through experience.

Kant does not take pains to distinguish an analytic from *a priori* proposition. However, it is clear that for him *a priori* necessity is different from analytic necessity. Again, *a posteriori* propositions are all synthetic. But Kant would not maintain that all synthetic propositions are *a posteriori*. According to Kant there are propositions which are *a priori* and yet which add to knowledge. Again, *a priori* proposition may have a predicate which is not contained in the connotation of the subject.

For a critical and highly informative study of analytic-synthetic and *a priori* and *a posteriori* propositions the reader is directed to consult *Experience and the Analytic* by Alan Pasch (The University of Chicago Press 1958). Here this much I hope, would suffice. The distinction between the analytic and the synthetic is based on the *content* of propositions. Here the question is, 'Does the proposition add or does not add to cognition or knowledge?' If it does, it is called synthetic; if it does not, it is called analytic. However, the distinction of *a priori* and *a posteriori* propositions has reference to the *sources* of cognition. *A priori* propositions stem from *pure reason* or pure understanding. As such they are valid independently of any experience whatsoever. *A posteriori* propositions, on the other hand, are derived from experience. They, therefore, require experience for their validation.

For most of the empiricists *a priori* and the analytic propositions, and, *a posteriori* and the synthetic propositions are identical. For Kant, as noted earlier, synthetic propositions instead of being *a posteriori* may be *a priori*. For the empiricists in general, they are absurd and self-contradictory, and consequently nonsense. For Kant, however, synthetic propositions *a priori* are most significant in scientific cognition and are found in mathematics and in physics.

#### 8.07. Synthetic Judgments *a priori* in Mathematics

Propositions of mathematics are universal and necessary. For example,  $5+7$  are together equal to 12. Being universal and necessary such propositions will be called *a priori*. But doubt would arise with regard to their synthetic character.

In order to show that  $7+5$  are together equal to 12, all that we have to do is to demonstrate that 12 is not already contained in the subject ' $7+5$ '. This would be regarded now as false. Most probably Kant's explanation is not correct, and, this will adversely affect the formulation of the problem which he has tried to solve in the *Critique of Pure Reason*. However, we shall confine ourselves to the explanation of Kant. According to him the subject ' $7+5$ ' contains nothing over and above the uniting of both these two numbers into one, and in this no thought is being taken as to what that single number may be which combines both.<sup>1</sup> According to Kant, the subject ' $7+5$ ' simply connotes a *process of adding* and in itself it does not refer to the *product*. Here, according to Kant, the predicate or the product 12 is very easy to calculate. This obviousness of the product gives one the impression that the predicate is already contained in the subject ' $7+5$ '. However, if we take sufficiently large numbers of six or seven digits each, then of course by adding on fingers we cannot reach the product.<sup>1</sup>

Obviously the explanation offered by Kant is not satisfactory. Indirectly he appears to be referring to the *psychological* process of adding, since he refers to 'larger numbers' to support his case. In the case of 'larger numbers' in the subject the actual process of counting them on fingers would not be possible to find out the sum-total or the aggregate. However, the consideration is logical. We have to decide, whether the predicate '12' is not already contained in the subject ' $7+5$ '. It is immaterial whether one is able or not to add the numbers on one's fingers. Here Kant should not have confused logical issue with a psychological one. It appears that Kant was aware of the difficulty and if he had not been prepossessed with the creative notions of his 'transcendental' philosophy, he would not have resorted to the poor explanation regarding arithmetical judgments as synthetic. Kant fares no better with regard to geometrical judgments.

A Geometrical judgment is synthetic, according to Kant, for example 'The straight line between two points is the shortest'. Here the predicate 'the shortest' could not be contained in the subject 'the straight line between two points', since, according to him, *the straight* is a qualitative notion, while *the shortest* is a quantitative concept. Therefore, the quantitative predicate cannot be contained in the qualitative subject. Therefore, according to Kant, Geometrical propositions are synthetic. Nobody now would accept the explanation of Kant, since 'the straight line between two points is the shortest' is a primitive proposition of geometry and as such will never be taken as synthetic.

### 8.08. Synthetic Judgments *a priori* in Physics

Pure physics, according to Kant, contains synthetic judgments *a priori*. For example, 'everything that happens or every event has its cause.'

1. N.K. Smith, *Ibid.*, p. 33.

In order to hold that it is synthetic, we have to show that the predicate here is not already contained in the subject, either in part or whole, explicitly or covertly. Now by 'event' is meant any succession of two or more happenings. By 'cause' on the other hand is meant a *necessary* connection between two or more successive happenings. Consequently the element of *necessary connection* is not contained in the subject 'event' which means mere successive happenings. Thus the predicate 'cause' is not contained in the subject 'event' or 'things that happen'.

'Every event has a cause',

Hence, according to Kant, is a synthetic judgment.

Most probably there is not much difficulty now in taking factual judgment of physics as synthetic. At present, however, they are regarded as probable. Kant, on the other hand, regards such a judgment to have an *a priori* necessity. In other words, he thinks that a physicist undoubtedly takes recourse to sense-experience. But the data of sense-experience are discrete and chaotic. And they have to be organised and ordered into scientific judgments. However, here Kant would emphasize with all his might that no scientific judgment which is valid for all persons can ever be produced without resorting to the principle for causality. So 'causality' for Kant is a *must* for every physicist. The notion of causality no doubt cannot be derived from chaotic and discrete sense-data, yet this notion does help in ordering the sense-data. So causality being non-empirical can yet be indispensable for ordering sense-data or organising them into factual knowledge proper. So Kant regards 'causality' as an *a priori* necessity in physics.

Hence, for his 'Every event has a cause' is also *a priori*.

First, 'everything that happens has a cause' will no longer be regarded as universal and necessary. In physics the law of causal determinism has become outmoded. Therefore, it will not be called *a priori*. But in the days of Kant, without accepting the law of causal determinism no physicist would have proceeded in his investigation. Hence, Kant had taken this law to be universal and necessary.

For Kant knowledge means scientific knowledge which is found in mathematics and physics. An analysis of scientific knowledge of physics and mathematics shows that they are constituted by synthetic judgments *a priori*. And Kant in his *Critique of Pure Reason* tried to solve the problem, how synthetic judgments *a priori* are possible. But as indicated above, if such a judgment is not logically possible in mathematics and physics, then the problem of Kant turns out to be a pseudo-problem, and, his solution turns out to be equally fictitious and meaningless. In this sense the harsh judgment of Russell concerning Kant becomes justifiable.<sup>1</sup>

Hume, by his criticism of the concept of causality awakened him from his dogmatic slumbers so at least he says, but the awakening was only temporary, and he soon invented soporific which enabled him to sleep again.

1. *Ibid.*, p. 678.

However, we do not agree with Russell. First, Kant's philosophy is to be judged not in terms of logic and statements of science alone. They remain subordinate to his philosophical vision. And the vision of Kant is as living today as it was to him and to his contemporaries. Besides, the nature of synthetic judgment *a priori* was first stated by Kant and today its logical analysis is itself a fruitful enquiry. We think that the contention of Kant concerning synthetic judgments *a priori* can be formulated afresh to remain valid and significant even now.

### 8.09. Synthetic Judgments *a priori* in Metaphysics

Kant was most anxious to show that there are *a priori* elements in knowledge which are not derived from experience and yet which help in increasing empirical knowledge. This is the real meaning of the synthetic judgment *a priori*, that is, according to Kant, there are elements which increase our knowledge (i.e., synthetic) without being empirical (i.e., *a priori*), or, there are universal and necessary cognitions without being analytic. However, the central point of Kant lies that *a priori* elements serve to increase *empirical* knowledge. So some elements in knowledge have to be derived from experience. This condition is not observed in metaphysics, according to Kant. In metaphysics we deal with the supersensible entities like God, immortal self, the cosmos etc. None of these objects can be experienced. So the *a priori* principles are not applicable to them. Therefore, according to Kant, metaphysics as a science is not possible. The attempt at extending knowledge with the help of *a priori* elements alone, without reference to empirical objects, land us, according to him, into hopeless illusions. However, though we realize the illusory nature of metaphysical objects, yet we can never completely shake them off. Hence metaphysics, according to Kant, is not a science but is supported by a natural disposition in man.

For human reason. . . .proceeds impetuously, driven on by an inward need, to questions such as cannot be answered by any empirical employment of reason, or by principles thence derived.<sup>1</sup>

### 8.10. Main Divisions of Kant's System

Kant was meditative and methodical. A desire for thoroughness has made him highly analytic. As such Kant divides and sub-divides his subject into indefinite details. So one is likely to lose the thread of the main argument. In the midst of leaves and branches, one gets a glimpse of the wood with some difficulty. Hence the remark of Wallace:

There is a great parade of logical sub-divisions, and yet a great abruptness often to be felt in the succession of paragraphs. It is only gradually and with

1. N.K. Smith, *Ibid.*, p. 36.

labour that one can shake off the feeling of drowsiness induced by the multiplicity of currents which murmur here and there over the ground; only after several attempts that one is able to grasp the general drift and direction of the stream.<sup>1</sup>

It was Kant who has introduced the tripartite division of mental processes into cognition, cognition and affection. Corresponding to these three divisions. There are three *Critiques*, namely, *Critique of Pure Reason*, *Critique of Practical Reason* and *Critique of Judgement*. In the history of philosophy Critique of Pure Reason has played more important part than the other *Critiques*. Therefore, we too shall pay more, if not exclusive attention to it.

The *Critique of Pure Reason* is really a treatise on epistemology with special reference to science. But even here the cognitive process has been subdivided into three, namely, *sensing*, *understanding* and *reasoning*. But of course Kant is concerned with *a priori* sensing, understanding and reasoning. So Kant's enquiry is of the *a priori* forms of sensing, understanding etc., and not so much of the objects of sensing, understanding and so on. So in the first instance, Kant divides his Critique in the following way.

#### **Critique of Pure Reason**

##### **Transcendental Aesthetic**

Here Kant shows that there are *a priori* forms of sensibility. Everything to be perceived must be spaced and timed as the very condition of its being perceived at all. Propositions of mathematics can be synthetic *a priori* only when space (on which Geometry is based) and time (on which successive numbers are based) are *a priori* percepts.

##### **Transcendental Logic**

##### **Transcendental Analytic**

(In this central section of his work, Kant shows that just as there are *a priori* forms of sensing, so there are *a priori* forms of thinking also. Here he deduces and proves twelve concepts of the understanding. Scientific knowledge, as in physics, according to Kant, results from interpreting and combining the discrete manifold of sensibility in judgments with the help of the twelve categories of the understanding. This section contains metaphysical, transcendental deduction of the categories, the Schematism and the Principles of pure understanding).

##### **Transcendental Dialectic**

(In this final division of his work, Kant shows that without precepts, with the help of the twelve categories of the understanding alone, one cannot know the supersensible entities called the World, Soul and God. Attempts to know these three Ideas of Reason lead to three transcendental illusions called *paralogisms* (concerning Soul), *antinomies* (with regard to the World) and *Ideas* of reason (in relation to God). Though these Ideas are not constitutive they are yet *regulative* of scientific knowledge).

### 8.11. Transcendental Aesthetic

Here Kant tries to answer the question, how are synthetic judgments *a priori*

1. W. Wallace, *Kant*, p. 159 (Blackwood Series).

possible? Of course, according to Kant, knowledge proper is a joint product of percepts and concepts. But in this section, he is dealing with *a priori* percepts. The reason is that Hume had agreed that the proposition of mathematics were universal and necessary. But then he added that they were so because they were only analytic and did not describe any actual state of affairs. In other words, they were purely conceptual. On the contrary, Kant was convinced that they were synthetic. Hence he tried to show that mathematical propositions were really derived from perceptual experience, but he also added that they were based on *a priori perception* of Space and Time. As such they were synthetic, according to Kant.

Now a percept can be either empirical or pure. An empirical percept is one which has been derived from some sense-experience. For example, the table before me or the black blackboard in front of the students is an empirical percept. A pure percept, on the other hand, is not the sense-experience of this or that object given in our present consciousness, but is at the basis of *any perception whatsoever*. Further, Kant regards this *pure* percept as also *a priori*, that is, the percept which has not been derived from any sense experience, but which is *presupposed* by any sense experience.

In order to show, therefore, that mathematics is based on perception, Kant is concerned to show that it is based not on any empirical percept, but on *a priori* or pure percepts, i.e., on those percepts which have not been derived from any sense-experience, but are presupposed by any and every sense-experience. According to Kant, space and time are the *a priori* percepts on which all other empirical perceptions are based. Hence, for him the statements that judgments of mathematics are synthetic means that ultimately they are based on the *a priori* percepts of space and time.

Further, for Kant space meant primarily Euclidean space, which according to him was unalterable and all-pervasive feature of any perception of outer things. Keeping these things in mind, Kant proceeds to show that:

1. Space and time are *not* concepts, but are *percepts*.
2. They are not empirical percepts, but are *a priori* or pure percepts.

Secondly, he has to show that not only Space and Time are *a priori* percepts, but also that unless they are so regarded the synthetic *a priori* character of mathematical propositions cannot be explained. The first part is known as the *Metaphysical*, and, the second part is known as the *Transcendental* exposition of Space and Time.

**Metaphysical Exposition:** Space and the corresponding notion of Time for Kant are percepts, i.e., are particulars and are not concepts or universals. We shall confine ourselves to space, supposing that the same argument can be applied to Time as well.

1. Concepts are formed by comparing the various *instances* and by concentrating on common and essential qualities found in them after ignoring their inessential factors. If space were a concept, then it would also be reached by

having instances of space. But are there *instances* of space of the same kind as are individual instances of the concept cow or man? Three feet long or ten yards of length are not really instances, but are *parts* of a single space. Hence space is really one and has no instances. Therefore, it can only be a percept or one particular or an individual entity.

2. Again, the same contention can be supported by a slightly different statement. A concept *subsumes* a number of instances coming *under* it. For example, the concept 'cow' subsumes a number of particular cows of various builds, colours and kinds. But certainly all the particular cows are not lumped up together to yield the construction of a gigantic cow. Even if it could be done, the gigantic cow will not be known as the concept 'cow'. However, in the case of space, all the so-called instances of space come *within* it and go to make or constitute it. So really Space is not a concept but is a percept which is constituted by a number of its parts called spaces.

### 812. Space and Time Are *a priori* Percepts

It is not enough to show that Space or Time is a percept and not a concept. Rather the important thing is to prove that it is *a priori*. If Space or Time is not *a priori*, then it is *a posteriori*. If it is derived from experience, then two views are possible, namely,

- (a) Space or Time is really objective, existing in its own rights. This was the view of Newton according to which Space is an objective receptacle of outer objects. Kant refutes this view of Newton, but we shall refer to it in connection with Transcendental Exposition.<sup>1</sup>
- (b) Space or Time is not an objective receptacle, but is an appearance and is relative. However, it is derived from experience. Kant tries to refute this view of Leibnitz, to which we may turn now.

For Leibnitz only the monads which are spiritual, exist. As such there could be no space or time as real. However, Space or Time has been derived from experience of things as near and far, above and below etc. But Kant asks, if there was no notion of Space for the beginning then certainly there could be no experience of things as outside or alongside one another. The very experience of objects as outside or alongside of one another presupposes, the notion of Space. Therefore, instead of taking the experiences of objects (as near and far, outside and alongside) as explaining the notion of Space, we have to maintain that the notion of space is *presupposed* for explaining such experiences themselves. Therefore, experience cannot explain the notion of Space. The idea of space is prior to any perceptual experience. Hence it is *a priori*.

If the idea of space or time were derived empirically, then it could be imagined to be non-existing as is the case with colour, taste or smell etc. But though we

1. N.K. Smith, PR, pp. 44, 48.

can imagine a particular object not to have this colour or that, or not to have this smell or that, or even not to have any colour at all, yet we can never think of an object not to have spatial characters at all.<sup>1</sup>

We can never represent to ourselves the absence of space, though we can quite well think it as empty of object.<sup>2</sup>

Because space can never be thought away, therefore, for Kant, it is an *a priori* form of perception, without which there can be no perception whatsoever.

### 8.13. Transcendental Exposition

In metaphysical exposition Kant has shown only this much that Space and Time are *actually given to a priori*. Space is an *a priori* form of all outer perception, and time is an *a priori* form of all perceptions, whether outer or inner. The reason for this claim in favour of time is that even outer perception is a form of mental process which is always found in succession. Now by a transcendental exposition is meant 'the explanation of a concept, as a principle from which the possibility of other *a priori* synthetic knowledge can be understood.' (P.R. 45)

Therefore, a transcendental exposition of Space and Time consists in showing that the propositions of mathematics as synthetic judgments *a priori* are possible if and only if space and time are *a priori* percepts. Secondly, this possibility of synthetic judgments *a priori* can follow only if space and time are taken as the *a priori* forms of all perceptions.

If Space is not *a priori*, then it can be derived from experience. If it is derived from experience, then it is either an appearance, as Leibnitz supposed, or it is an objective receptacle of outer objects. We have already refuted the view of Leibnitz concerning the empirical origin of the idea of space, so let us see now whether Newton's idea of space as an objective receptacle, existing in its own rights can be taken as satisfactory. If space were an objective entity, having an independent reality of the perceiving mind, then it can be known only by being experienced. But if it be derived from experience, then the empirical notion of space cannot have strict universality or true necessity.

Thus the idea of space cannot be empirically derived. Therefore, it is prior to experience. Only by taking this as such we can explain the synthetic *a priori* character of mathematical judgments. Because space and time on which mathematics is based are *a priori* forms of sensibility, so they would be felt to be the same by all persons, since they are the subjective conditions of perceiving for all persons.

1. Here Kant seems to ignore the observation of Berkeley who pointed out that extension without secondary qualities is as difficult to perceive, as secondary qualities without extension are difficult to be perceived.

2. N.K. Smith, *Ibid.*, p. 44.

Again, since space and time are entrenched in the human constitution itself of perceiving any object at all, so human mind cannot help perceiving objects except as spaced and timed. Mind cannot help perceiving except in its own way. A child can perceive objects only in his own childish ways, and a dog in his own canine way by smelling them, so man can perceive object only by spacing and timing them. Space and time are the two glasses through which we can perceive the world of objects. If we do not use them, then we cannot perceive at all; and if we do make use of them then objects cannot but be coloured by the colour of the glasses. So human minds cannot but perceive objects in space and time.

Thus mathematical judgments being based on Space and Time can be strictly universal and necessary, only if space and time are *a priori forms* of all perceptions or pure intuitions. They will also be synthetic since they are based on pure perception or intuition of space and time.

### 8.14. Conclusions of Transcendental Aesthetic

First, we are not in space and time, but space and time are *in us*. This paradox simply means that space and time are the subjective forms of perceiving any object for all human beings. Because they are subjective in the same way for all human beings, therefore, they are truly objective. Ordinarily in the terminology of commonsense realism and science 'objective' is that which is free from any subjective involvement that is, in the cognition of which no desire, passion or any condition of the subject or knower should enter. This is, however, not Kant's or even the idealist's definition of the term objective. By 'objective' is meant for them that which is the same for me, for you and for all at all times and places. In this sense and time are objective, for they are public and the same and must be (necessarily following from the very necessity of human constitution of perceiving objects) the same for all.

Objectivity is universal validity. . . . a dream all men dream together, and which all must dream, is not a dream, but reality.<sup>1</sup>

Kant at once hastens to add that space and time having universal validity, are certainly *empirically real*, but are no less *transcendentally ideal*. This means in simple language that space and time are real for practical concerns of life. They are not real absolutely. In the language of the *Vedanta*, they have *vyavaharika satta*, but do not have *paramarthika satta*. So far as the world of science and commonsense is concerned, they would be experienced alike as spatially and temporally real. But in the final analysis, they are simply subjective forms of knowing.

1. One wonders whether *a priori* forms of space and time can be called pure *perceptions* at all. It has created linguistic confusion for Kant.

Kant later on makes an important distinction of *phenomena* and *noumena*. In the light of this distinction we can say that space and time can yield knowledge of phenomena only. This admission follows from the fact that whatever we perceive, we colour them, modify and transform them by spacing and timing them. Without doing this we cannot perceive them at all. But what things, apart from our modes of perceiving them, are in themselves, we have no means of knowing. Might be that objects are really spaced and timed, or might be they are not at all in space and time. For example, a fish can know what life in water is, but it cannot know what life in any other media could be. We do not know how angels or Gods perceive objects. We know only this much that we perceive objects only by spacing and timing them. But within this world of phenomena scientific knowledge is possible. Everybody perceives objects in the same way and must perceive them in space and time. Hence, universal and necessary knowledge of phenomenal percepts is possible for Kant.

Is there then no distinction between facts and fiction? Of course, this absurd conclusion does not follow from the doctrine of Kant. According to the view of Kant there is a great deal of contrast between the transcendental subjectivity of space and time and the subjectivity of the so-called secondary qualities. The so-called secondary qualities are called subjective because they vary from persons to persons; are relative to the perceiver and are contingent. On the other, space and time are universal, uniform and the same for all persons. The secondary qualities are subjective because they are variable; but space and time are transcendently subjective because they are universal. Further, the secondary qualities are qualitative could not be reduced to quantitative precision. But space and time are at the very basis of mathematical precision. However, Kant would say that the distinction of secondary and primary qualities is applicable to the world of phenomena and even the primary qualities do not, according to Kant, belong to the noumena. Again, ordinary illusions like seeing a rope as snake can disappear after being checked. But this does not happen with regard to space and time which remain permanent and ubiquitous. The illusions of everyday life are like dreams which vary from persons to persons. Kant would call them as *mere appearances* corresponding to the dream-reality of Shankara.

From the *Aesthetic* one is likely to judge that knowledge is possible from mere percepts. This of course is false. Percepts are mere materials. They have to be further combined to yield knowledge proper. The work of combination is done by the faculty of understanding. But Kant was anxious to explain the synthetic character of mathematical judgments. Therefore, he has exclusively limited himself to showing the intuitive character of mathematical perception. Pure intuitions of space and time do not deal with the empirical properties of objects. Yet they do help in perceiving them. Hence Kant has shown that some contributions of mind are non-empirical, which yet help in the acquiring of empirical knowledge. Therefore, Kant has shown that there are cognitions in mathematics which increase our knowledge

without being empirical. This is the same thing as saying that there are synthetic judgments *a priori* in mathematics.

One of the reasons for regarding space and time *a priori* is that one can never empirically perceive any object without finding it spaced or timed. One question can be asked? Is this inability logical or psychological? Kant himself is not very clear on this point. He tells us that this is the subjective condition of our sensibility. He also suggests that they are 'subjective constitution of the senses in general'<sup>1</sup>. Hence, in this aspect the subjective necessity of perceiving all things in space and time are psychological. But if it is so, then it is a matter for the psychologist to decide and not for philosophers. The main function of philosophy is to clarify concepts in use and to pursue an empirical enquiry. If this be so, then Kant's enquiry ceases to be philosophical or even meta-psychological.<sup>2</sup>

If on the other hand, space and time are logical modes of perceiving things, then they cannot be empirical. Most probably Kant never meant his enquiry to be psychological. When he calls space and time *pure* intuitions, then he certainly means that they are not sensuous. But if space and time are not empirical, then no judgment based upon them can ever be called synthetic. Had Kant been clear, much confusion of his system would have been avoided.

### 8.15. Transcendental Logic

Kant makes a sharp distinction between *sensing* and *understanding*. In sensing an object, the mind remains passive, as Locke's view of the mind as *tabula rasa* had represented. But this is not enough for the explanation of the knowing process. The manifold of sense are discrete and passing impressions. Obviously a proposition is a combination of two or more ideas. This knowledge consists of judgments which are the combinations of two ideas. Hence, the knowing process consists in *combining* the ideas.

Here the two terms 'thinking' and 'knowing' have to be distinguished. By 'knowing' is meant the thinking process validly applied to percepts.

∴ Knowing = Thought × Percept.

But Kant holds that thinking, being an active and spontaneous activity, unlike the passive sensibility, can continue to combine and synthesize pure concepts alone, even in the absence of appropriate percepts. This might give us the semblance of knowing, but which really can yield no knowledge proper. We shall find that in metaphysics we *think* about God, Soul and the World, though we can never *know* them. Hence thinking is much wider than knowing, and, the limit of knowing is not the limit of thinking.

Now we can say, according to Kant, that knowing consists in thinking about percepts. To think means to combine the percepts into judgments with the help of

1. Falckenberg, R., *History of Modern Philosophy*, p. 350.  
2. PR, pp. 54, 56.

concepts. Ordinarily, we combine the ideas in judgments which have been empirically acquired and associated. For example, this grass is green. We have already acquired the empirical concepts of 'grass' and 'green'. Further, this combination of 'grass' and 'green' appears to us to be objective, that is, the same for all persons. The question is, how can this objectivity of empirical judgments be explained? There are only two ways in which we can explain this: (i) The combination involved in objective empirical judgments is really so in its own right in nature, independent of any human knower; or, (ii) this combination is *a priori*, being introduced by the faculty of thinking called understanding.

If the combination between ideas, as in the greenness of the grass, were objective in its rights, apart from human knowers, then it can be known only by being experienced. But experience can never bestow strict universality and necessity. But natural science, which for Kant meant physics, does contain synthetic judgments *a priori*. Obviously then the objective combination of ideas in judgments cannot be empirically explained.

Hence, as we have already seen in the case of space and time, the objectivity of empirical judgments can ultimately be explained only if we could show that there are *a priori* forms of thinking which are also termed as *categories*. Unfortunately, as observed just before, thinking need not be confined to percepts and may be applied to concepts also; and when it does so it leads to transcendental illusions. Hence the transcendental logic has two parts:

#### I. Transcendental Analytic

Dealing with the *discovery* and *proof* of the *a priori* categories of the understanding

- A.(i) Discovery of the 12 concepts of the understanding by reflecting upon the 12 kinds of formal judgments given in Logic.
- (ii) Transcendental proof of these 12 concepts showing that by their means alone an object can be thought to be empirically and objectively actual.

#### II. Transcendental Dialectic

- B. Use and application of the concepts. This deals with the illegitimate use of the concepts with regard to the supersensible objects yielding the transcendental illusions of paralogisms, antinomies and Ideals of reason.

#### Transcendental Logic

Analytic of *Concepts* (Dealing with the discovery and proof of the twelve categories of the understanding)

Schematism

Analytic of *Principles* (Dealing with the use and application of the categories)

Principles of pure understanding

#### 8.16 Discovery of Pure Concepts or Categories

Just as sensibility yields percepts, so understanding makes judgments possible. So let us take a judgment, 'This stone is heavy as it appears to me' or, 'It seems to me that the sun heats this stone'. These are instances of empirical judgments which are true to one subject only, as is clear from the phrase 'It appears to me', or, 'it seems to me'. This bringing together or the synthesis of 'stone' and 'heavy' is for my private, momentary and relative consciousness only. As soon as my consciousness lapses the heaviness of the stone will cease for me. Kant is not interested in explaining such transitory, subject-dependent and relative judgments. He wants to concentrate on judgments of science which are true for all persons in the same public way. In other words, he wants to explain judgments which are empirically real for all persons, which may also be called objective in the sense already defined. The example of Kant of such judgment is: 'This stone is heavy', or, 'The sun heats the stone'. If the statement is true, then it is so for all persons. Now Kant undertakes this problem in his *Transcendental Analytic*: What should be the nature of this synthesis or the concepts which help such a synthesis in order that such judgments be universally and necessarily true for all persons? One again the necessity which Kant has in mind is *a priori* necessity and not *analytic* necessity. In general, Kant thinks that an objective judgment, that is, a judgment which is empirically true for all human subjects, consists in a synthesis between two ideas through an appropriate concept. Hence, in order to lay bare the objective synthesis involved in an objective judgment, one should be sure of the underlying concepts.

Further, concepts may be empirical or *a priori*. An empirical concept is one which has been derived from sense-experience. For example, concepts of cow, colour or table have been derived from our experience of them. But such concepts cannot help an objective synthesis. The reason is that empirical concepts of cow, dog, or colour differ from persons to persons, depending on the varying sense-experience of the people. Hence, Kant is in search of *pure* concepts which have not been derived from any sense-experience whatsoever. He calls such pure concepts also *a priori*, i.e., concepts which are prior to or independent of any experience whatsoever. And yet without which no objective judgments concerning matters of fact are possible.

Now in an objective judgment like 'This stone is heavy', there must be some such *a priori* concepts which alone render such a judgment true for all persons. According to Kant, the underlying *a priori* concept in 'This stone is heavy' is substance-accident. Similarly, 'The sun heats the stone' has been possible because of the concepts or category of causality. Kant rejected the humean explanation of Substance or Causality, for according to Hume, such concepts have been derived from constant experience, according to the law of Association of Ideas. If Hume's explanation were correct, then the concepts of Substance or Causality will be empirical and not *a priori*. But if causality be an empirical concept, as Hume contends, then no objective knowledge based on it will be true for all. This is supposed to be the sceptical conclusion of Hume. But Kant would hold that such a sceptical conclusion is not warranted by scientific knowledge. Science, according to Kant, invariably uses the concept of causality and by doing so yields an objective knowledge of facts. So against Hume, Kant would say that Substance and Causality are not empirical, but are *a priori* or pure concepts.

Granted that there are *a priori* concepts like those of Substance, Causality and so on, without which no objective judgments concerning facts are possible. The further task is to find them out and also to demonstrate their number. How are we going to discover the concepts and fix their number? Well, the position of Kant is that knowledge or an objective judgment is a joint product of percepts and concepts. That is, as soon as percepts are supplied by the sensibility, the understanding which is the faculty of thinking out concepts, at once becomes active. Hence, the concepts of the understanding have not been derived from any or any number of perceptual experience, yet they are found in any objective judgment concerning perceptual knowledge. If it is so, then such concepts can be discovered and their number determined by analysing, scrutinising and examining all possible judgments in their pure form, without being mixed up with any empirical matter. Fortunately as Kant thought formal logic had established already all the possible forms of pure judgments, so the task of Kant lies in analysing such formal judgments by which alone, according to Kant, both the concepts and their number can be conclusively established.

### 8.17. Discovery of the Pure Concepts

Understanding thinks or conceives. To think is to judge. Therefore, in order to find out all the possible modes of thinking we have to establish all the possible forms of judgment. Kant took for granted that all the possible forms of judgments were exhausted in Aristotle's fourfold classification of judgments. In the light of recent developments in logic it would not be correct to say that these are all the possible forms of judgments. But at present we have to ascertain the nature of deduction or the discovery of the concepts. Kant has to discover not all kinds of concepts. Of course, there are empirical concepts. But empirical concepts cannot confer true universality and objectivity upon judgments. We have to confine ourselves to

judgments from which matters of thinking have been abstracted. The process is analogous to the proof of space and time as *a priori*. We have to abstract everything empirical in the hope of discovering what is not derived from experience at all. In formal logic we deal with forms alone apart from matter. Therefore, Kant finds it easy to find out the pure form of thinking by reflecting on the forms of all judgments as given by formal logic.

Formal logic has classified all the possible judgments according to *quantity*, *quality*, *relation* and *modality*. Corresponding to each form of judgments, Kant deduces a particular concept:

#### Kinds of judgments

##### I. Quantity

1. Universal All S/is/P
2. Particular Some S/is/P
3. Singular This S/is/P

##### II. Quality

1. Affirmative S is P
2. Negative S/is not/P
3. Infinite S/is/not-P

##### III. Relation

1. Categorical S is P
2. Hypothetical if S, then P
3. Disjunctive S is either P or Q

##### IV. Modality

1. Problematic S may be P
2. Assertory S is P
3. Necessary S must be P

#### Table of Categories

1. Unity
2. Plurality
3. Totality

1. Reality
2. Negation
3. Limitation

1. Substance—Accident
2. Cause—effect
3. Reciprocity or Action-reaction

1. Possibility—Impossibility
2. Existence—Non-existence
3. Necessity—Contingency

In the first instance, readers may be confused by the terms 'concepts or categories' and 'judgments'. But there need be no confusion. We have defined a judgment as a *synthesis* between two or more ideas. How is this synthesis possible? The synthesis is achieved through concepts. Even an empirical concept brings together a number of observed particular instances under a general idea. For example, the concept 'green' clips together a large number of different shades of green. The same is true of 'cow' which pins up together all the observed and possible instances of black, brown, white cows and so on. Again, let us take a judgment 'grass is green'. Here the synthesis between 'grass' and 'green' has been achieved through the concept of 'green grass'. Further, the relation of green and grass has been possible because of their being experienced together for a number of times. The synthesis between 'green' and 'grass' has been brought together through the association of ideas. According to Hume a concept does synthesize, but then he would add, the synthesis is always empirical, being based on the

psychological law of the association of ideas. Kant does not deny that there are empirical syntheses through concepts which have been derived from experience. He would, however, hold that such empirical judgments cannot be regarded as scientific or objectively true. Men have different associations and they will vary from persons to persons. On the other hand, scientific judgments, and what is the same things as saying that the concepts through which they are possible, are the same for all persons. Now Kant takes it for granted that there are such objectively valid scientific judgments, consequently for him there are again concepts through which judgmental syntheses are carried out that are true for all persons. Hence, Kant tries to lay bare those universal and necessary concepts without which there can be no objective judgments. Such concepts, of course, following the terminology of Kant, must be regarded *a priori*.

Those concepts that underlie all possible judgmental synthesis have been called categories since the time of Aristotle. Hence, the *a priori* or pure concepts can also be called categories. The most important categories for Kant, categories that lie at the basis of scientific judgments, are substance and causality. For Kant, unless such categories be regarded *a priori* no scientific judgments can be rendered explicable. The empiricist Hume, as a consistent empiricist, cannot accept anything *a priori*. Hence, this is the most vital difference between Hume and Kant. In any case, we can now understand as to why Kant is concerned with the discovery of the *a priori* concepts or a categories.

Kant has called the first six categories, derived from formal judgments according to quantity and quality, as *mathematical*. The remaining six were called *dynamical*. Mathematical categories are concerned with all objects, whether pure or empirical. The dynamical categories are concerned with the existence of these objects, in their relation either to each other or to the understanding. Again, the former have no correlates; but the dynamical categories always go in pairs.

Kant uses the term 'category' for describing *a priori* concepts. The term was used by Aristotle for all the modes of predicates in any judgment whatsoever. But the list of the ten categories given by Aristotle, according to Kant was neither exhaustive nor systematic. Further, Kant holds that the third category under each heading is a synthesis of the second category with the first. Thus, *totality* is plurality considered as unity; *limitation* is simply reality combined with negation; *action-reaction* is the causality of substances in reciprocal relationship; and, *necessity* is just the existence given through the possibility itself. Thus, this observation of Kant<sup>1</sup> might have thrown out hints for the triad of *thesis*, *anti-thesis* and *synthesis* of Hegel's famous dialectical method.

Thus, according to Kant, knowledge begins with discrete and passing impressions. If mind were not stirred into its own activity of forming and combining these manifold of sensory data, then there would be no knowledge at all. Fortunately,

mind at once is thrown into activity as soon as impressions are imprinted on it. First, the mind moulds the sensations by the forms of space and time to yield percepts. But these percepts too have to be further actively combined into judgments under *a priori* concepts of Substance, Causality, Affirmation, Negation etc. The underlying assumption of Kant is that the *a priori* concepts of the understanding have their legitimate sphere of the percepts alone. Hence, his oft-quoted statement is that *percepts without concepts are blind, and, concepts without percepts are empty*. Percepts may be compared to soft clay and concepts to moulds. Soft clay without being put into proper moulds have no specific forms. It is like Aristotle's 'matter' without any shape. Similarly, moulds without the soft clay is empty and by themselves cannot produce any image or earthenwares. However, only when the soft clay is put into moulds then we get earthen articles. Thus, Kant agrees with the empiricists that without the matter supplied by sense-experience there would be no knowledge whatsoever. However, he was equally convinced that without *a priori* forms of sensibility and *a priori* concepts of the understanding there could be no true objectivity in knowledge. So he agrees with the rationalists no less. Wallace has put this into the following picturesque style:

The spark of fire which runs along the line of sensations and sets them in a blaze; the string which gather the single beads into a necklace; the glass which collects the beams of sentient life into a focus,—is what we call intellect. Synthetic unity is the one function of thought—the one architectonic idea which lays sense-brick to sense-brick, and builds the house of knowledge.<sup>1</sup>

The metaphorical way of putting the relation between percepts and concepts can be replaced by a clearer statement. Obviously, mere ideas by themselves, as in fiction, cannot yield knowledge of any empirical object. So concepts without percepts are blank and airy nothing. In the same way whatsoever cannot be thought cannot be known either. For example, square circle is not an existing thing. Even if there were experiences, say the mystic vision of God which cannot be expressed or thought, then it would not lead to any knowledge at all. So any intuition which could not be conceived is infra-cognition.

Of course, moulds are meant for the clay. In the same way we can say with Kant that the concepts of the understanding have their legitimate sphere of percepts alone. But the understanding has spontaneous activity of its own. It works even when there are no percepts, with the result that we get pseudo-knowledge concerning metaphysical entities of God or Soul. Further, in the absence of percepts, concepts have the other function of arousing *reason* in the service of *faith* and *morality*. Thus, we have to determine now the following with regard to the *a priori* concepts of the understanding:

1. PR, p. 74.

1. W. Wallace, *Kant*, p. 195.

1. The legitimate use of concepts in the service of knowledge. Further, the most important thing we have to do is to show that without the synthetic activity of the understanding there can be no objective empirical statements.
  2. The limit of the useful employment of the concepts, the transgression of which leads to Transcendental Illusions.
  3. The transition from the realm of knowledge to the sphere of faith and morality, that is, to the activity of *practical reason*.

We shall now take up the first part which Kant has discussed in *Transcendental Deduction of the Categories*.

### 8.18. Transcendental Deduction

First, the deduction is transcendental which means that it deals not with this or that instance of thinking but with the general condition of thinking. In other words, the enquiry is concerned with *a priori* mode of judging or thinking or connecting the matters of perception in judgments. We have to show that there are certain *a priori* conditions without which there could be no possible experience at all. Again, following the meaning of the term 'deduction' as used by eighteenth-century jurists, Kant means the establishing of the logical right of these categories in constituting empirical knowledge. The earlier enquiry has shown that there are categories which are involved in any judgment. But it is not enough to show that the categories are found in all judgments as a matter of fact. We have to further show that unless they are granted as the sole means of determining objectivity in empirical knowledge, our enquiry would not be complete. Hence, *transcendental deduction* means that there are *a priori* categories of the understanding which determine the objectivity of empirical statements and that by their means alone such statements can ever be obtained.<sup>1</sup>

At the outset a warning is necessary. Though the explanation which Kant offers is couched in psychological terms, its purpose is strictly logical. Kant agrees with the empiricists in holding that sense-impressions are discrete and separate. However, knowledge consists in connecting them into judgments. Of course, space and time are the first steps in synthesizing the discrete data into percepts. But this passive synthesis is not complete. Even Locke had noted that the complex ideas are formed by the greater activity of the mind. This activity, according to Locke, lay 'in comparing, contrasting and compounding the simple ideas in diverse ways'. Obviously, this activity of comparing and connecting is not derived from experience. Therefore, Kant argued that these connecting activities are introduced into the discrete data of experience by the understanding.

Again, from the *Transcendental Aesthetic* one might get the false impression that percepts do not involve any other synthesizing process over and above those

provided for by space and time. Now we see that the perception of even a 'line' requires the synthesizing activity of the understanding. In other words, without the synthesizing activity of the understanding there can be no object of any empirical knowledge. This spontaneous activity of the understanding in synthesizing the discrete data is the *a priori* ground of any empirical knowledge, and is expressed in threefold syntheses, namely,

1. The synthesis of apprehension in intuition.
  2. The synthesis of reproduction in imagination.
  3. The synthesis of recognition in a concept.

**The synthesis of apprehension in intuition:** Ultimately any perception, whether of outer objects or of inner process, is given in time. Now suppose there is alone A B having various parts. Unless the divisions of A B are held together in one single apprehension, we cannot have the idea of A B as a whole. If we could

X      X<sup>1</sup>      X<sup>2</sup>

perceive the parts alone, say, AX, AX<sup>1</sup>, AX<sup>2</sup> etc., then we would perceive separate parts AX, AX<sup>1</sup>, AX<sup>2</sup> etc., but not a complete line composed by these parts as A B. Hence, the multiplicity of parts must first be run through and grasped together in one whole. This is known as 'the synthesis of apprehension in intuition.'

The explanation given here reminds one of the Gestalt theory of perception. But Kant is not emphasizing the psychological phenomenology in perception. He is pointing out the logical condition of perceiving an object as one whole.

*The synthesis of reproduction in imagination:* Again, when we look at the line A B, we successively perceive the parts AX, AX<sup>1</sup>, AX<sup>2</sup> etc. This observation would be clearer still if we take for example the perception of a building or a long wall. When we have to perceive the whole line A B or the whole long wall, then at the time we are perceiving the part AX<sup>2</sup>, then the image of the previous parts AX and AX<sup>1</sup> must be faithfully reproduced and must fuse into AX<sup>2</sup> and other successive parts. If we drop out AX, AX<sup>1</sup> at the moment of perceiving AX<sup>2</sup> and other successive parts and do not faithfully reproduce them in our further successive perceptions, then no object can ever be correctly perceived as one whole thing. According to Kant, if this condition be not granted then even the most elementary perception of objects in space and time would not be possible.

Kant of course is referring here to the absolute fusion-theory of perception, according to which the past experience of an object is reproduced and fuses into the presentative factors of perception. For example, we are just receiving only the visual data of a tree. But we perceive a tree as hard, fragrant, solid etc., as a result of past experiences of touching, smelling, pressing it and so on. These past experiences are reproduced in image-forms and fuse into the presentative visual data to yield one synthetic perception of a tree. Now this fusion-theory is not

1. PR, p. 82.

supported by empirical evidence at least in the light of perceptual Gestalten. But once again, the explanation of Kant is not affected by the fate of the fusion-theory of perception. Kant is advancing a logical condition of perceiving the line A B or a tree as one object if each one of them is perceived part by part. And every object involving more than one moment of perception would certainly involve the perception of various successive parts severally. In order that an object be perceived to be the same for me at all times and for others the various elements of the manifold must be correctly reproduced as parts of a necessarily related whole.

### 8.19. The Synthesis of Recognition in a Concept

Not only the past perceptions AX, AX<sup>1</sup> are correctly reproduced but I must be aware of the fact that it was 'I' who perceived AX and, AX<sup>1</sup>. By this statement concerning 'I' is meant that there is the same consciousness which reproduces the various past images and fuses them into one unitary experience of an object.

If we were not conscious that what we think is the same as what we thought a moment before, all reproduction in the series of representations would be useless.<sup>1</sup>

Suppose that the line AB is twelve yards long. If I perceive the fifth yard and forget that I have already perceived its parts consisting of four yards, then I shall not know the line as twelve yards long. But how would the past perception of four yards form part of the same line? Only if I be aware of the fact that I who am perceiving the fifth and the sixth yards of the line, did also perceive its previous parts of four yards. The consciousness which in perceive the part of the fifth and sixth yards is the same as that which severally perceived its preceding parts. Further, implicitly there is the possibility of my being aware of my own past experiences in relation to the present consciousness of the line or a tree or a building. There is an underlying unity or sameness of a self-consciousness. In some cases at least I can explicitly be aware of the fact that it was 'I' who perceived the parts and it is the same 'I' who am recognizing my past experience to be the same which had occurred to me in the past. Thus 'I think' must accompany every perception as its most fundamental condition of objectivity.

In other words, the consciousness which *apprehends* the parts severally which later *reproduces* the various images of its past and which finally *recognizes* them as one and the same parts belonging to one related whole must be the one and the same all through.<sup>2</sup> If we, like Miss Lucy or Beauchamp, what we perceive a moment before forget in the next, then we can have no knowledge at all. This can be

1. PR, p. 84.

2. "There must, therefore, be a transcendental ground of the unity of consciousness in the synthesis of the manifold of all our intuitions, consequently also of the concepts of objects in general, and so of all objects of experience, a ground without which it would be impossible to think any object for our intuitions; for this object is no more than that something, the concept of which expresses such a necessity of synthesis." (PR, p. 85).

illustrated thus with the help of a story.

A drunkard in a state of intoxication challenged a nawab saheb who was riding on an elephant and asked, 'what is the price of the elephant?' This infuriated the nawab and he ordered his courtiers to put him in the hajat to be produced the next morning in the court. The man was produced in the morning in the court and was asked: 'Are you going to buy the elephant?' The man with folded arms answered: 'The man who wanted to buy is not present here'. Phillip the drunk is not the same as Phillip the sober. But in order that there be a whole of interrelated parts there should be one and the same Phillip the sober.

The synthetic unity of apperception which is the final condition of connecting percepts objectively into judgments is not empirical. Descartes, according to Kant, in vain sought to find out the permanent self on the basis of 'cogito'. *Cogito* at most can say that there is thinking, but not there is a permanent thinker. Here Kant agrees with Hume that on the basis of empirical introspection nobody can 'catch the permanent self'. If one enters most intimately into what one calls one's self, then one stumbles but on some passing feelings of pleasure or pain, but one never catches one's self. But because one does not discover permanent self, therefore, one cannot argue that it is not implied in knowledge. The synthetic unity of apperception is *a priori*.

There must, therefore, be a transcendental ground of the unity of consciousness in the synthesis of the manifold of all our intuitions and consequently also of the concepts of objects in general, and so of all objects of experience, a ground without which it would be impossible to think any object for our intuitions; for this object is no more than that something, the concept of which expresses such a necessity of synthesis.<sup>1</sup>

Of course, the synthetic unity of apperception is *a priori*, that is, it is a ground of any objective connection at all, without which there can be no knowledge whatsoever. The connection which is introduced is the same for me at all times for there is one and the same consciousness which carries on the diverse operations of sensing, imaging and conceiving. This unity being *a priori* is the same for all persons. Hence it is the absolute condition of objective empirical knowledge. But Kant would not agree that synthetic unity be raised to the status of one Absolute Mind. For Kant the *a priori* synthetic unity of apperception is only a logical presupposition of any objective empirical knowledge. However, Hegel and the Hegelians have transformed this logical presupposition of Kant to the status of a metaphysical reality. This is very clearly seen in Green's idealism where there is an easy transition from 'relating consciousness' to the existence of an Absolute Mind.

1. PR, p. 85.

This part, as also the main contention of the *critique*, assumes that sense-impressions are discrete and separate and the cognition of the object as one whole thing is a later work of construction and elaboration by the Mind. Kant would emphasize the essentially *a priori* forms of sensibility and *categories* of the understanding as the combining principles of the discrete, sensory impressions into the cognition of an object. But if we discard this assumption and accept that an object is a given Gestalt then the whole Kantian explanation would fall to the ground. Where will there be the necessity of the synthetic unity of apperception for synthesizing apprehension in intuition, reproduction in imagination and recognition in conception? Thus the rise of Gestalt psychology of perception has rendered much of Kant's Transcendental Aesthetics and Logic obsolete.

### 8.20. The Synthetic Unity of Apperception and the Categories

In order that there be objects of knowledge, they must be presented as necessarily inter-related wholes. Further, to be inter-related wholes, they must be connected by means of certain fixed rules. These fixed rules of combining the percepts into objective judgments are known as the categories. Finally, in order that the rules be the same and identical for all, they must be grounded in the same unity of consciousness. This consciousness to be the same for all must be *a priori*. Hence, we can say that the combining functions of the categories are all derived from the fundamental unity of apperception.<sup>1</sup> We can also say that the peculiarity of our understanding is that it can produce *a priori* unity of apperception by means of the categories.<sup>2</sup> Summarising the result we can state the whole thing thus:

(I) First, we receive the discrete, disconnected manifold of impressions through our Sensibility. As soon as discrete impressions are received, the mind is at once stirred into activity and the passing manifold are arranged into percepts through the two forms of Space and Time. The combination of discrete impressions into *percepts* arises automatically. In any case the combination found in sense-impressions is not there in them, but is introduced into them by the sensibility which works only by spacing and timing them.

But the combination (*conjunction*) of a manifold in general can never come to us through the senses, and cannot, therefore, be already contained in the pure form of sensible intuition.<sup>3</sup>

(II) But percepts turn do not constitute knowledge. For example, when we utter the word 'tree'. Is it a piece of information? No. Only when we give some information which can be rejected, accepted or modified *in principle*, then alone it can be given the name of 'knowledge'. For example, 'This tree is green'. This

1. *Ibid.*, pp. 92, 97.

2. *Ibid.*, p. 98.

3. PR, p. 91.

can be rejected or accepted or modified *in principle*. Hence, it does constitute knowledge. But then it is no longer a percept 'tree': it has become a judgment. A judgment alone is a constituent of knowledge and is a true unit of knowledge. In this sense, a percept is an implicit judgment. Now a judgement is a relation between two or more percepts. How are the percepts combined into a judgment? All combination of percepts, empirical or non-empirical, conscious or unconscious, is an act of the understanding.<sup>1</sup> This combination of percepts into judgments is done through the concepts or categories.

(III) But the unity or the synthesis as a whole, at both the levels of sensibility and understanding is not itself derived from either sensibility or understanding, but is prior of and basic to both of them.

This unity which precedes *a priori* all concepts of combination, is not the category of unity; for all categories are grounded in logical functions of judgment, and in these functions combination, and therefore, unity of given concepts, is already thought. Thus category already presupposes combination. We must, therefore, look yet higher for this unity, namely in that which itself contains the ground of the unity of diverse concepts in judgment, and therefore of the possibility of the understanding, even as regards its logical employment.<sup>2</sup>

This supreme condition of any combination at any level is the *synthetic unity of apperception*. Now all the principles of combination of the understanding are derived from this fundamental principle of the transcendental unity of apperception.<sup>3</sup>

This transcendental unity of self-consciousness is neither empirical (as Descartes supposed) : nor ontological (as later on Hegel supposed) : but is wholly logical.

### 8.21. Understanding Makes Nature Out of the Materials it Does Not Make

There can be no knowledge without some system and order. But obviously there must be materials to be ordered. Understanding is the sole faculty, according to Kant, which produces connection, order and synthesis into the discrete data obtained from sensibility. So far as human beings are concerned, according to Kant, they can think or systematise the data only when they are supplied to the intellect. Only through our sensibility can we receive our data. Thinking or understanding cannot sense, and sensibility cannot think. Of course, there can be an intuitive intellect, possibly of God, which produces objects by thinking about them. However, human beings have to wait for sensory data to be supplied to their understanding. For example, however hard we think of snow during summer heat

1. PR, p. 91.

2. PR, p. 92.

3. PR, p. 97.

we cannot produce any low temperature at all. Similarly, in our hunger pangs we cannot enjoy even a morsel of food if we think very intensely of a feast. We have to remain dependent hopelessly on sensibility for the materials of our thought. Only when the materials are given by our senses, concerning colour, whiteness, hardness etc., then alone understanding in conformity with the *a priori* unity of apperception can combine them into objective empirical judgments like 'this sugar is white'. Thus, understanding can make judgments out of sense materials which it cannot produce, but which it has to receive from sensibility.

Kant of course was very keenly conscious of the inadequacy of understanding when it functions with the help of concepts exclusively. By means of concepts, empirical or pure or both, not only we dream, imagine and produce fiction, but we think about the supersensible also. In the latter case we fall into the illusion of having knowledge with the help of the understanding alone. However, factual knowledge proper can never be obtained through concept alone. Therefore, Kant was of the opinion that understanding can rightfully function only when materials are supplied to it by sensibility. This follows from the very nature of the case in which synthetic unity of apperception comes into operation. We become conscious of the synthetic unity when there is an internal process within us, say the sensing or feeling pleasure. But this is possible 'only through the existence of actual things which I perceive outside me'<sup>1</sup>. Hence, the supreme condition of the objectivity in knowledge is based on the supply of data by our sensibility. Hence understanding can produce connected knowledge only when the materials are given to it. Thus far Kant would agree with the principle of verifiability.

However, here the first part of the sentence under discussion requires a greater elaboration, namely, *understanding makes nature*. According to Kant, understanding alone is the sole faculty of introducing connection, order and laws. Any system which we find in nature is not there in its objective right. If it were so, we would know it only by having sense-experience which can never give universality and consequent objectivity (i.e., universal validity). Hence, understanding alone gives laws to nature. But the question is, how can subjective conditions of understanding or thinking have objective validity? Why would nature respect the laws which our understanding prescribes to it?

In the first instance, by 'nature' we do not mean here 'nature over and above human mind, existing by itself as a thing-in-itself'. By nature is meant here 'a sum-total of interrelated appearances'. Naturally, nature for us is only a system of phenomena bound by certain laws or order of connections. So understanding gives laws to nature which is only a sum of phenomena, and not a noumenon. As we have already posited that there can be no connection anywhere except what understanding produces, so the system in nature can be the work of understanding only. In this

1. PR, p. 138.

From such statements one can easily draw the Hegelian conclusion that the Absolute realizes itself as concrete consciousness by positing its 'other' called nature or matter.

sense, understanding gives laws to nature which nature cannot but accept. This follows from the fact that nature is only a sum of phenomena. A phenomenon is one which is moulded, transformed and coloured by our two forms of sensibility, namely, space and time. Secondly, it is further ordered and systematised by being conceptualised. If any connection has to be derived from understanding then nature in its *inter-connected* system of phenomena can derive it solely from the understanding. Thus, however exaggerated or absurd it may sound that understanding makes nature, that is, produces an ordered system of appearances according to its categories, nonetheless such an assertion is correct, says Kant, and is in conformity with experience.

Accordingly, the order and conformity to law in the phenomena which we call *nature* we ourselves introduce and we could never find it there if we, or the nature of our mind had not originally placed it there.

Just as percepts cannot but be transformed by our forms of sensibility, so phenomena cannot but get connected, according to the laws which our understanding gives to them. If they do not get connected as our understanding would mould them, then we shall never have them connected. And if they be not connected, then they would be too transitory to be objects of any knowledge at all. Hence, nature as a system of phenomena cannot but obey the laws which our understanding prescribes to it. In this sense understanding makes nature.

## 8.22. Has Kant Faced the Scepticism of Hume?

Both Hume and Kant had agreed in tacitly maintaining that empirical knowledge can be universal, certain and objectively valid. Then again both of them were equally aware of the fact that empirical knowledge to be objectively valid has to be a connected system which is being built out of perceptual data. For both of them perceptual data were discrete and separate, so connection between them had to be introduced by the categories of substance, causality etc. But Hume was a thoroughgoing empiricist. If substance, causality etc., are at the basis of ordering the discrete sensory data, then, they in the last resort have to be empirically derived. He tried to do so on the basis of association of ideas and imagination. Kant did not pay attention to the part which, according to Hume, imagination played in the formation of the ideas of substance and causality. If the 'imagination' of Hume be very akin to the 'understanding-faculty' of Kant, then the difference between Hume and Kant would be greatly narrowed down.<sup>1</sup> But from the viewpoint of the history

1. Hume had pointed out that imagination as a faculty of producing belief works according to principles which are permanent, irresistible and universal. Again, as a faculty of producing fancies, imagination works according to principles which are changeable, weak and irregular (*Treatise*, pp. 225-26, ed. Selby-Bigge). Inasmuch as Hume tried to explain objective thinking with the help of 'permanent, irresistible and permanent principles' he came very near to Kantian solution (W.H. Walsh, *Reason and Experience*, pp. 181ff. Clarendon Press, 1947).

of philosophy we can say that the explanation of Substance or Causality by Hume on the basis of the association of ideas was not acceptable to Kant. The reason is that an empirical derivation of substance and specially of causality showed that they were idle figments of imagination. Any knowledge based on these fictions would be equally fictitious. For this reason Hume denied the possibility of empirical knowledge, and, in the history of philosophy this has been called the scepticism of Hume.

To-day the denial of necessary or certain knowledge about matters of fact will not be termed as scepticism. As a matter of fact no empirical statement can have the certainty of logically necessary propositions. Factual propositions can be probable only and it would be an illogical demand to ask for certainty, beyond reasonable probability, of factual propositions. However, Kant did not give this reply to Hume's scepticism. He wanted to defend the possibility of synthetic judgments *a priori* in physics. In other words, at least ostensibly Kant sought to show that universal and necessary propositions are possible in physics. For doing so Kant attacked the empirical explanation of substance or causality given by Hume.

If causality were based on experience, then of necessity it could be only contingent, relative and variable like all other products of experience. Therefore, according to Kant, Hume had correctly shown that on the basis of experience all that we can maintain is that causal connection consists of *sequence* of events but not of any necessary *consequence*. On the basis of experience we can say that in the case of so-called causal relation there is *contiguity*, but there is neither *continuity* nor *connection* between the two events. But if mustness or necessity cannot be obtained from experience, then how can mere association create it with regard to mental expectation? In other words, according to Hume, if fire and heat go together for a number of times, then due to custom or association a mental habit is formed by which mind is forced to expect one (heat) when the other (fire) is presented. How can we ascribe necessity to the rule of association itself? Any law whether of association or of mental habit of expectation has universality about it, and, how is this universality to be explained on the basis of experience?

How is this association itself possible? The ground of the possibility of the association of the manifold, so far as it lies in the object, is named the *affinity* of the manifold. I therefore ask, how are we to make comprehensible to ourselves the thoroughgoing affinity of appearances, whereby they stand and *must* stand under unchanging laws?<sup>1</sup>

We have already seen that strict universality and necessity cannot be obtained by experience. Should we deny like Hume that causality or substance is a figment of imagination? Kant agreed with Hume that the 'necessity' of causal connection is not empirical. For this reason it would also be a mistake to obtain 'necessity of causal connection' from experience.<sup>2</sup> But causality cannot be denied for with the

1. *Ibid.*, p. 27.  
2. PR, p. 35.

denial of causal necessity, according to Kant, pure philosophy will be destroyed. Further, Kant held that mathematics contains synthetic judgments *a priori*. And with the denial of causality mathematics will also be denied,<sup>1</sup> along with general science of nature.<sup>2</sup> According to Kant, the correct approach should be that causality or substance is an *a priori* function of the understanding. They are born out of subjective necessity. But this 'subjective necessity' as a result of *a priori* endowments of the understanding is quite different from the subjective necessity resulting from the psychological law of association. As association is likely to differ from persons to persons, so the subjective necessity will also differ from persons to persons. Hence because Hume's causality is based on subjective necessity created by custom or association, therefore, there can be no universality and objectivity in knowledge based on this kind of causality. But *a priori* subjectivity is the same for all, because it comes out of a uniform mental constitution of any human knower whatsoever. Hence, *a priori* subjective necessity alone ensures strict universality and objectivity, according to Kant.

Therefore, Kant held that the scepticism of Hume was ill-founded. If knowledge is based on causality and, if causality is not fictitious, then certainly knowledge is possible. However, this possibility of knowledge is accompanied with certain limitations. Knowledge is confined to percepts alone which have to be moulded by the *a priori* forms of space and time and further synthesized by the categories of substance and causality and so on. These *a priori* forms of sensibility and understanding so transmute and transform all objects of knowledge that we cannot be sure of their real nature. We know only the phenomena. We have no means of knowing at all what things-in-themselves are. But within the realm of phenomena, we have knowledge proper. Hence, Kant's agnosticism is considered to be a sufficient answer to the scepticism of Hume. But is it acceptable to us?

Has Kant really directly dealt with the problem of Hume? Hume was concerned with regard to the universality and objectivity of such empirical laws as 'bread nourishes the body' or, 'all material bodies gravitate.' His patent enquiry is, is there any necessary connection between fire and heat? According to Hume the relation is contingent, for we always imagine that fire instead of giving us heat may be followed by cold. Before we determine of nature of Kant's reply to Hume, we should analyse the problem of Hume.

In the light of current analysis of empirical laws we can say that in the roughest outline it has two parts, namely

- (i) The protocol statements in relation to the theoretical construction in the respective science in question.
- (ii) The connection between them through the help of the rules of logic and mathematics.

Both Kant and Hume would agree with regard to the first part involved in empirical laws. Hume like all other classical empiricists had imperfect notion

1. *Ibid.*, p. 80.

2. As was understood by the scientists at the time of Kant and even much after until the establishment of the principle of indeterminacy in microscopic universe.

concerning the laws of logic and mathematics which go to connect the protocol statements, which in the language of Hume were called 'impressions'. The rationalists felt the importance of the rules of logic and mathematics. They, however, were wrong in holding that these rules by themselves can constitute empirical knowledge. Only in recent times a satisfactory relationship has been established between sensory data and the rules of logic and mathematics. True, Kant's explanation of these rules in terms of *a priori* elements in knowledge would be considered vague, inaccurate and even confusing. But it must be accepted that it was Kant who effectively pointed out to Hume that empirical knowledge is a joint product of senses and intellect (to which even Leibnitz had hinted in his criticism of Locke). Kant again was right in maintaining that the rules which connect the sensory data are not themselves impressions or their derivatives. What is called *a priori* by Kant is treated to-day as 'convention'. So in current language, Kant's terminology would be considered unsatisfactory. And it is so, but inasmuch as Kant pointed out the importance of logical rules in the formation of empirical laws, he must be considered to have answered Hume.

But it is not enough to say that there are logical laws in the formation of empirical knowledge. One should have shown this in detail. Kant has not done it. His sketchy reply to Hume is that in general 'impressions' alone cannot constitute knowledge. Secondly, the rules of logic are necessary. This observation of Kant would be regarded as a meta-scientific statement. Such meta-scientific statements are too general. Unless rules of application are laid down for deducing specific empirical statements, they would be regarded as too speculative. And Kant also takes it in the same light. So, what about the specific empirical laws like 'all things gravitate'? Kant does not conceal this problem here. He points out that all empirical laws stand under the categories of understanding, but their content has to be obtained from experience.

Special laws, as concerning those appearances which are empirically determined, cannot in their specific character be *derived* from the categories, although they are one and all subject to them.<sup>1</sup>

But the important thing is to show that one and all of such specific laws are subject to the categories. And this Kant has not done. So his reply to Hume is only partial. Secondly, can any specific *empirical* law be taken as universal and necessary, even when it is guided and constituted by the categories? Hume would say that it is *probable* only. Can Kant go beyond this? Most probably not. Kant's observation here is that the *a priori* laws alone which constitute experience *in general* can be universal and necessary. Specific laws being dependent upon experience can only be probable in character. Kant should have said this much only that empirical laws can be probable in character and might have added that no reasonable scientist

1. PR, p. 103

should demand more than this. Kant really remained content with showing that in the formation of empirical knowledge there are rules of logic which within their framework can be taken to be universal and necessary. But, of course, the time was not ripe for saying so. It was enough for Kant to have shown the place of the rules of logic or the categories of understanding in the formation of scientific laws. Thus, Kant's reply to Hume is not sufficient, but is certainly a step forward towards meeting Hume's scepticism.

However, if we analyse the whole problem then it comes to this. Kant replied to Hume by accepting the possibility of synthetic judgments *a priori*. Hume would not accept this. Therefore, we should pay a little more attention to the problems Kant raised and the solution he offered with regard to them.

### 8.23. Are There Synthetic Judgments *a priori* in Mathematics and Physics?

Many objections have been raised concerning Kant's distinction between Analytic and Synthetic judgments. In the first instance, it is pointed out that Kant's distinction is not logical but metaphorical. He thinks of subject and predicate as containers and contained. How can precise relation be stated by means of metaphors? Secondly, Kant refers to the distinction only when judgments can be expressed in terms of subject-predicate theory. However, since the time of Frege, Russell and others logic of relation has increasingly come to acquire more attention. Can we treat the judgment

'A is greater than B'

in the form of subject-predicate relationship? Obviously not. Should we say then that Kant's distinction is true for a very narrow range of judgments? Well, this can be said.

However, none of these two objections could be considered too formidable. By suitable modifications Kant's distinction between the Analytic and Synthetic can yet be upheld. But there is a third objection of considerable importance for Kant's philosophy. In the light of the definition of *Analytic* judgments, we can say that the predicate here is *necessarily* contained in the subject. Nobody can deny 'redness' of 'red rose' without involving himself in self-contradiction. So there is an analytic necessity. But Kant so defines *a priori* judgments that they also appear to be necessary.

Necessity and strict universality are thus sure criteria of *a priori* knowledge, and are inseparable from one another.<sup>1</sup>

Hence we can formulate the syllogism thus:  
All necessary judgments are *a priori*.

1. N.K. Smith, PR, p. 27.

All analytical judgments are necessary.

∴ All analytic judgments are *a priori*.

In other words, in the light of the criterion of necessity analytic and *a priori* judgments can be just identical. If it is so, then the synthetic judgments *a priori* may come to be the same or synthetic judgments analytic. And this is a manifest contradiction. How can a synthetic judgment which is merely probably be also called *necessary*? This self-contradiction, according to the logical empiricist, cannot be removed, since for him necessity always means analytic necessity and as distinct from it there is nothing like *a priori* necessity.

Certainly Kant would most emphatically reject the contention that *a priori* necessity is the same as analytic necessity. He would maintain that analytic necessity may yield *clearness* but can never help to *amplify* our knowledge. An *a priori* necessity helps us to do that. According to Kant, substance, causality etc., do help to synthesize and amplify our knowledge purely *a priori*. And this cannot be done by analytic necessity.

Upon such synthetic, that is, ampliative principles, all our *a priori* speculative knowledge must ultimately rest; analytic judgments are very important, and indeed necessary, but only for obtaining that clearness in the concepts which is requisite for such a sure and wide synthesis and will lead to a genuinely new addition to all previous knowledge.<sup>1</sup>

A second point in this connection is that analytic necessity is quite clear to anybody by a mere inspection at the terms employed. For example, 'A rainy day is a wet day' is necessarily true by a mere inspection at the terms 'rainy day' and 'wet day'. In contrast, *a priori* necessity of causality, substance or of the two forms of sensibility require a very detailed demonstration and even then it may not be above doubt and further discussion.

How is it then that the empiricist fails to see this distinction in the writings of Kant? Of course, prejudice is one factor. But apart from this, Kant has interpreted the mathematical necessity which is merely analytic necessity as *a priori* necessity. For example, Kant explains

'7+5' are equal to '12'

as *a priori* synthesis. Nobody now will regard such judgments as synthetic. They are purely analytic, since in principle the predicate is already contained in the subject. Today we will say that this judgment is analytic since it is based on a consistent employment of the stipulated terms seven, five, plus, equivalence, twelve and so forth. But why has Kant called judgments of mathematics *a priori*?

Well, Kant thinks that the notion of number is acquired from counting and counting depends on succession of time. But the ultimate notion of time, according

1. N.K. Smith, PR, p. 32.

to Kant, has not been derived from any experience. Similarly Kant thinks that ultimately the whole of geometry is derived from the notion of Euclidean space. Kant most emphatically repudiates the contention that Space and Time are concepts which have been derived from our experience of relations between things. Yet, according to Kant, nobody can frame any judgments in mathematics without the notion of Space and Time. They are a *must* for any mathematician. Hence, he called such necessity *a priori*.

We might say now that Kant had some reason for regarding Space and Time *a priori* since in his days nobody could imagine that there could be mathematics without employing the notion of Euclidean Space and Time. But have we any reason now for regarding them as necessary? Of course, with the possibility of many types of Geometries, it is no longer proper to say that every geometer must think in terms of Euclidean Space and the same thing is true about Time in the light of recent developments in algebra. Should we not say then that Kant's contention that Space and Time are necessary for all mathematicians and so are *a priori* in his sense false? Well, it might be so. Euclidean Space and Time are no longer necessary and so are not *a priori*. This only means that Kant's theory is not correctly illustrated. But this does not show that *a priori* necessity is the same as analytic necessity. All that we can say that Kant's contention is no longer tenable. But we cannot say that his problem of synthetic judgments *a priori* are self-contradictory. However, the empiricist may raise two more objections. In the first instance he may say that if Space and Time are not *a priori*, then any judgment in mathematics is only analytic and so, why call it *a priori* at all? Secondly, he might urge, has not Kant called space and time *a priori* what is not really *a priori*? It was a mere matter of historical development of mathematics that up to his time, Space and Time were regarded as necessary for the mathematicians, why should we take a historical accident for a logical must? We shall take up the latter question afterwards. Let us take the first question first.

True, by *a priori* Kant means that which is necessary and in the light of recent developments in mathematics the notion of Space and Time cannot be regarded as *must* for a mathematician. Should we not say, since the Euclidean Space and Time are no longer *a priori*, and so there is no longer *a priori* necessity for the mathematician, therefore, any intelligible sense of 'necessity' is analytic necessity. If it is so, should we not drop out the term '*a priori*'? True in the light of the present analysis of mathematical propositions, one would deny their synthetic character and would accept the view that the judgments of mathematics are analytic only. Yet with some suitable emendation, the Kantian notions of *a priori* can be saved. Kant can yet ask: Granted that the notion of Euclidean Space and Time be discarded, but can we altogether dispense with any notion of Space and Time? As we cannot; as some notion of Space and Time is still a must, so the notion of Space and Time can yet be regarded *a priori*. The only difference is this. The Space and Time of Kant's *Critique of Pure Reason* are fixed, invariable and *a priori*. The emended notion of

Space and Time will be variable, but yet *a priori*.

Most probably the notion of *a priori* too will have to be emended. Kant vaguely maintains that certain mental forms or ways of sensing or perceiving are embedded in the very mental constitution. At times his explanation of the *a priori* tends to be psychological: Whereas what he really means is logical. Hence, by *a priori* is meant 'psychological necessity' then it would be tantamount to Humean notion according to which there is a psychological necessity born out of the laws of association with regard to notions of causality etc. But a psychological necessity is just a fact, a matter of inner experience; and so cannot be called logical necessity. But if we regard *a priori* as logical necessity, even then we have to accept that this is purely a matter of convention. Some conventions may be more useful than others and we may grant that Space and Time are very useful conventions. But no longer by *a priori* necessity can we mean anything which is fixed and invariable for all persons at all times.

But after introducing these emendations in the philosophy of Kant, will there be any significant difference between the empiricist and Kant? I do not think so. Do we not then denude Kant's philosophy of its distinctive features? Well in the first instance Kant's contributions will remain distinctive in its own proper historical perspective. Secondly, Kant's logic and epistemology are mere subordinate elements in his total philosophy. The vision, the world-view of Kant remains as distinctive, as illuminating and as instructive as it was in his own times and even afterwards. As the synoptic world-view is the very soul of Kant's philosophy, so the distinctiveness of Kant's philosophy, so far as it relates to the most essential feature of philosophy, remains as the most rewarding adventure of human thought. Most probably there can be no higher tribute to Kant's thought if we could show that his vision can be yet defended in the light of modern logic and recent advances of scientific knowledge. We shall take up the second objection in our consideration of synthetic judgments *a priori* in physics.

#### 8.24. Are There Synthetic Judgments *a priori* in Physics or Science?

Kant took for granted the Newtonian view of science, according to which Space and Time were regarded as the absolute receptacles of events and causality as the fixed and unalterable law of Nature. From this view Kant derived the conclusion that Space, Time and Causality are the *a priori* and fixed ways of ordering the discrete data of sensibility. These *a priori* forms of *sensing* and of *understanding*, for Kant were also synthetic in as much as they applied to matters of facts. Now in the spirit of Hume, the contemporary empiricist asks : Granted that there are certain fixed and unalterable modes according to which the mind orders the data. Is this conclusion concerning the ordering function of the mind analytic or synthetic, deductive or inductive? If the conclusion is inductive, then this is only probable in character. If so, then, these ordering principles of the mind cannot be called *a priori* (i.e., necessary). If, on the other hand, these principles be deductive,

then we shall be simply explicating what we have already put into the stipulated definition of Space, Time and Causality. As such the conclusion concerning them can only be analytic and would not be applicable to matters of fact, and, so will cease to be *synthetic*.

The same dilemma can be put more pungently with regard to causality.

If the principle of causality makes an assertion concerning the matters of facts, then it is not *necessary* and is open to doubt; and, if it is necessary, then it does not apply to matters of fact.

For Feigl, Kant could not have escaped from this situation.<sup>1</sup>

We are now more clear about the nature of scientific knowledge than what people knew about the time of Newton and Kant. No longer we would maintain the fixity of laws either in Nature or in Mind. Even the laws of logic are no longer regarded eternal. They are all relative and some of them still rule the roost because of their usefulness, efficacy and convenience in our dealing with the world around us. If by *a priori* is meant that there are such laws of the human mind, then Kant's theory of the *a priori* would not be acceptable. Again, if by *a priori* is meant the *analytic* then the whole phrase *synthetic judgments a priori* would be self-contradictory. But did Kant mean anything so self-contradictory?

First, as has been suggested earlier already, Kant was just concerned with the problem of exhibiting the indispensable presence of the *a priori* factors involved in empirical knowledge proper. If sense-impressions be discrete and empirical knowledge be an ordered whole and also universal and necessary, then there must be non-empirical principles to account for strict universality and necessity. Of course, as we now know largely due to the Gestaltists that sense-impressions need not be discrete and due to the empiricist that scientific statements need not be universal and necessary. But Kant could not have gone beyond the intellectual horizon of his time and this is no reflection on him.

In the context of Kant's *Weltanschauung*, the order involved in scientific knowledge is not to be found in sense-impressions. Hence, it has to be traced to the faculty of reason which prescribes *a priori* rules of order and system. But does *a priori* mean for Kant analytic necessity? Of course, there are passages in the *Critique of Pure Reason* where *a priori* may mean analytic necessity. In the first place, both have the characteristics of universality and necessity and Kant makes no explicit distinction between analytic and *a priori* necessity. At times he equates the two. For example, with regard to Geometrical necessity he writes:

If he (a geometer) is to know anything with *a priori* certainty he must not ascribe to the figure anything save what necessarily follows from what he has

1. H. Feigl, what Hume might have said to Kant in *The Critical Approach to Science and Philosophy*, Edited by Mario Bunge, Free Press 1964, pp. 46-47.

himself set into it in accordance with his concept.<sup>1</sup>

But the two necessities are quite different for Kant. Analytic judgments, says Kant, do *clarify* concepts, but do not *amplify* them. On the other hand, *a priori* elements of our empirical knowledge by synthesizing the separate and discrete items of judgments,<sup>2</sup> and Kant's sole aim was to lay bare 'the principles of *a priori* synthesis'.<sup>3</sup> So far as laws of nature are concerned the most important *a priori* principles of synthesis for Kant are the categories of causality and substance. Hence, his problem is:

How categories can determine *a priori* the combination of the manifold of nature, while yet they are not derived from it?<sup>4</sup>

For Kant, all representations, i.e., percepts get connected through the faculty of understanding alone.<sup>5</sup> To-day the meta-scientist would not agree with Kant. He will not accept causality as the fundamental category, not even a category at all for subatomic events. Further, when causality is regarded as a category for gross material events it is not regarded as the product of a mysterious faculty. It will be regarded as a useful convention for describing the events concerning gross material bodies. Besides, laws would be regarded more as a matter of functional dependence between two events or even as a thing of statistical relationship. Hence the question of explaining *necessary* connection between events would not arise for the moderns. Should we, then, discard the contributions of Kant?

Well, the language of Kant is obsolete, but his statements can be easily emended. In a broad sense Kant was trying to bring out the truth that without the help of human language and its grammar it is not possible to have scientific knowledge. In his times, the rules of scientific language in the form of Space, Time, Substance, Causality and so on, were considered fixed and unalterable; to-day they are regarded as flexible and changeable conventions. There is no difference in the outlook for both Kant and the contemporary scientist agree in holding that in order to understand knowledge proper one should study the language of science. If Kant had known Quantum Mechanics, the 'theory of Relativity and the possibility of multi-dimensional geometries, then certainly his teaching would have been different. But he would still maintain that no knowledge proper is possible without the varying conventions of language and that these conventions arise out of the creative insight of the scientist. Kant would hold that no experiment is possible without some hypothesis in the mind of the scientist and finally any hypothesis ultimately rests on the scientific world-view. To the primitive man the world of

1. N.K. Smith, PR, p. 13.

2. PR, p. 32.

3. PR, p. 38.

4. PR, p. 102.

5. PR, p. 103.

magic was in the background in relation to which he would undertake to explain any phenomena at all. The contemporary scientist, as a result of much groping, has discarded every reference to the supernatural. Thus in science we do not observe or experiment upon phenomena at random. There are always some specific theories and far more specific hypothesis which we aim at confirming-disconfirming. The highly pervasive theories and the nebulous background of world-view may be termed *a priori* in the language of Kant. These theories and the world-view are not derived or are not empirically verifiable, but are relevant for any empirical knowledge whatsoever. Kant had this kind of function of the *a priori* in his mind which is reflected in the following:

Accidental observations, made in obedience to no previously thought-out plan, can never be made to yield a necessary law, which alone reason is concerned to discover. . . . Even physics. . . . if learnt at all, only from nature, it must adopt as its guide, in so seeking, that which it has itself put into a nature. It is thus that the study of nature has entered on the secure path of a science, after having for so many centuries been nothing but a process of merely random groping.<sup>1</sup>

Therefore, for Kant the conventions at the root of scientific pursuit arise from the creative insight of man and without such creative forms there can be no knowledge proper. Emended thus the teaching of Kant with regard to *a priori* forms is as pertinent today as it was in the days of Kant.

### 8.25. Schematism

Kant makes a sharp distinction between sense and intellect but then the concepts must be applied to the sensible in order to constitute knowledge. However, the concepts are universal, involving no element of time; but the sensible is essentially temporal. For example, the concept of causality being a logical category is timeless and yet being applied to the sensible something is necessary succession in time. Now there is the need for something which will mediate between the heterogeneous elements of sense and understanding. It is the form of time which is the form of all perceptions, whether external or internal. Time is pure like the concepts and is yet at the same time sensuous. Every concept then to be applicable to the sensible must be cast in the form of time, i.e., the abstract concept is to be imaged in the time-form. Every universal has to be pictured, i.e., a concept has to be exemplified by an instance of it. As soon as we think of man, we at once think of an imaged man. Now each concept requires a general picture, an ideal particular. For instance the category of substance is the idea of something which is always a subject and never a predicate. When it is schematized then it stands for something permanent in time. 'A secret art in the depths of the human soul' translates the intangible conception into a schema—a sort of generalised image, a universal which is withal

1. PR, pp. 14-15.

sensuous: not so much a picture itself, as a general formula or recipe for drawing pictures." Different kinds of categories are thus schematised:

1. **Quantity:** Time-series. One moment of time expresses *singularity*; general moments express *particularity* and all moments denote universality.

2. **Quality:** Time content. *Reality* is that which fills time, i.e., when a certain length of time is filled with uniform and continuous sensations. *Negation* is empty time, i.e. when the same length of time is characterised by the absence of sensations. *Limitation* is that in which we pass from the absence of sensation to some particular degree of sensation with a certain length of time.

3. **Relation:** Time-Order. *Substance* is that which remains permanent when everything else changes. *Causality* is that upon which something else invariably follows in time. *Reciprocal action* is that in which the qualities of substance and those of another are seen invariably appearing together in time.

4. **Modality:** sum-total of time or time-comprehension. *Possibility* is something existing at any time, *actuality* is that which exists at a definite time and *necessity* is that which exists at all times.

Thus the concepts come to be applied to the sensible through the time-schema. Our real thinking in science is pictorial,—always tinged with imagination. Thus the need for schematism ties down the intellect to a sensuous form, but then for the limitation to the sensible alone the schematism clothes the concepts in reality.

#### 8.26. Transcendental Dialectic

Kant has so far shown that both physics and mathematics are possible. Now his enquiry enters the final stage. He has to answer, is metaphysics possible? There is scientific knowledge according to Kant, but then it is of the phenomena alone. We have no means of knowing the supersensible or noumena. We have all the certainty and objectivity of knowledge so far as phenomena are given. But this demands that the concepts be applied to the sensible. Beyond the sensible we can *think* but then we cannot *know*. Knowledge is, then, highly limited but the human mind cannot rest content with the limited sphere of phenomena. It craves for absolute spontaneity, necessity, originality and finality. That faculty which leads the human intellect to the unconditioned, the totality or the whole of knowledge is called *Reason*. "All our knowledge begins with the senses, proceeds thence to the understanding, and ends with reason." As the understanding illuminates the sense, so the reason extends and guides the understanding. Just as the understanding unifies the sensible, so the reason instead of unifying the objects, unifies the operations of the understanding itself. We *infer* with the reason, just as we think with the understanding.

Physical knowledge is partial and conditioned. For example, nebula is the earlier stuff of the solar system which in turn is the origin of the earth. The earth with certain conditions gives rise to life and so on. The series can never be complete. But reason aims at giving us the totality of all conditions, the completion of the whole series. Certainly such unconditioned totality can never be an experienced

fact. Thus reason aims at knowing the non-experienced or the supersensible. Reason unifies the understanding with the three ideas of God, soul and world in the same way in which the understanding unifies the objects with the help of the twelve categories. But we shall soon see that corresponding to these three ideas of reason there is nothing in the reality. They do not *constitute* knowledge but *regulate* it, by presenting us the kind of ideal knowledge. If we treat the regulative ideas of reason for the constitutive elements of knowledge then we fall into many illusions called paralogisms, antinomies and Ideals of reason. These illusions are called transcendental, for by knowing them to be illusory, we cannot shake them off. Though they are illusory, yet they are not phantastic. They arise from the very nature of the reason itself. Ultimately they show the farthest limit of knowledge and prepare the room for faith.

Reason is the faculty inference and as there are three kinds of inference, so corresponding to them there are three ideas. From the categorical syllogism has been derived the idea of an absolute subject which can be identified with an immortal *Soul*. The hypothetical syllogism yields the idea of the final synthesis of all phenomena called the *World*. From the disjunctive syllogism is derived the idea of an absolute unity of all phenomena called *God*. As said above these ideas only regulate and guide our intellect in the pursuit of knowledge but they do not constitute knowledge, for knowledge proper is confined to the perceptible alone. However, these ideas are so captivating that we treat them to be real objects of knowledge and so they give rise to the transcendental illusions.

#### 8.27. Paralogisms of Reason

Psychology may be empirical or rational. An empirical psychology deals with the processes of feeling, emotion, thinking etc., which are given to us in our introspection. But these processes are all phenomena and are within the scope of the legitimate employment of the categories of the understanding. However, empirical psychology can never give us any knowledge of the permanent self or ego. In the language of Hume, when we enter most intimately into what we call our own selves, we never catch the permanent self at any time. But the human mind does not rest with the limited knowledge of the phenomenal self. It wants to know the permanent, eternal, free and the essential self. Inasmuch as this kind of self is not given in experience, so rational psychology (as opposed to empirical psychology) seeks to know the soul or self with the help of pure reason alone. However, there can be no knowledge proper without sense-experience or empirical data. Therefore, the bold bid of reason to know the supersensible 'self' is bound to yield invalid conclusions. These are termed by Kant '*paralogisms*'. 'A transcendental paralogism is one in which there is transcendental ground, constraining us to draw a formally invalid conclusion.'

As we think, according to quality, quantity, relation and modality, so transcendently there are four kinds of illusory statements, concerning the self.

1. **Quantity:** The soul is *substance*. I am aware of myself as a subject and never as a predicate.
2. **Quality:** As regards its quality, it is *simple*, but nothing by way of its content can be asserted.
3. **Relation:** The self continues to be the same *identical unity* through the different times in which it exists.
4. **Modality:** Self is in relation to *possible* objects in space. It means that self alone is immediately given in our consciousness and all other things are mere inferences from perceptions in our consciousness. Hence, self is independent of all material things.

The conclusion of the *transcendental analytic* is that there cannot be any proper knowledge of anything unless it is given to us by perception. Of course, Kant has referred to the presence of the *synthetic unity of apperception* as the indispensable *a priori* condition of knowing anything. But is the synthetic unity of self an empirical fact? There can be no greater blunder to treat it as such. The pure self-consciousness involved in any knowledge is only a logical condition and is not itself an object of knowledge. The self is pre-supposed in knowing anything, but in turn is not an object which is known.

Now it is, indeed, very evident that I cannot know as an object that which I must presuppose in order to know any object. . . .<sup>1</sup>

In our current language we can say that the language of ‘synthetic unity of apperception’ is the highest language known to us. With its help we can know about all forms of language below its level, but it cannot throw any light on itself. In order to know it we have to find out a language of still higher order of generality. As we have not found as yet any higher level of language, so no clear and precise statement can be made concerning *a priori* synthetic unity of apperception. This is a rule of procedure or a linguistic proposal which prescribes the way in which we can talk meaningfully about knowledge. But in its turn is not an object or a statement about which we can talk meaningfully.

There can be no knowledge proper concerning the permanent self. Whatever statement we make concerning it being purely conceptual, may be either tautologous or analytic, or even meaningless and fanciful but not synthetic and empirical. Here we shall be dealing with the shadowy and chimerical concepts alone without the percepts. But with the help of mere ‘bloodless’ or empty concepts, we cannot attain to knowledge proper. For example, Descartes through his formula *cogito ergo sum* hoped to establish the reality of a permanent ego. But this is really a tautology, according to Kant, ‘since the *cogito* (*sum cogitans*) asserts my existence immedi-

1. PR, p. 201. The reader is advised to consult a few pages more.

ately’.<sup>1</sup> As noted earlier, the *cogito* simply means that some thinking thinks.

Later on, we shall find that Kant has demolished the knowledge of a permanent, eternal and ‘free’ soul in order to make room for faith. We shall meet again these ‘ideas’ of soul in the *Critique of Practical Reason*. Meanwhile Kant has noted two important negative gains from paralogisms.

1. At least as long as one can *think* about these paralogisms of reason, one can free oneself from materialism. This shows that for thinking about self, one need not refer to material objects. So at least the thought concerning soul is possible without matter.

2. Of course, there is no knowledge concerning the immortal self. But paralogisms give me the right

to hope for an independent and continuing existence of my thinking nature, throughout all possible change of my state. . . .<sup>2</sup>

### 8.28. Paralogisms and Idealism

In § 6.07 we have already mentioned some of the characteristics of objective idealism. The contributions of Kant in the development of idealism are considered by many competent critics to be heavy. According to idealism there is an absolute mind with infinite potentialities which it realizes through matter, life and human minds. This form of idealism was greatly helped by the teaching of Kant in his *Transcendental Analytic*. First, according to Kant, ‘understanding maketh nature’. This means that the categories determine the laws of phenomena in general. This transforms the *esse est percipi* of Berkeley into *esse est intelligi*. But more, in the final analysis, the concepts of the understanding can determine the objective knowledge of things only when the mind which perceives and variously conceives the percepts is one and same throughout the mental operations. Hence, the conclusions are:

- (a) The synthetic unity of apperception is the absolute presupposition of any objective knowledge whatsoever.
- (b) This self-consciousness works through the various concepts which determine objects.

Thus objects are thoughts or concepts, as determined by pure self-consciousness. Later on, at the hands of the successors of Kant, the logical condition of the synthetic unity of apperception was raised to the status of an ontological entity in the form of an Absolute Mind. Hence, the transcendental idealism of Kant was transformed into the objective idealism of Hegel and the Hegelians. Now this form of idealism held that the absolute mind actualizes self through the various objects which constitute nature. These objects are not only phenomenal, as Kant would

1. PR, p. 185.

2. PR, 197.

hold, but also real. Now the reality of the Absolute Mind directly follows from Kant's paralogisms. As a matter of fact Kant clearly states that transcendental idealism, which he holds, shows that nature or matter is but a product of mind. His statements can be briefly outlined thus.

According to Kant's transcendental idealism, no objects as things-in-themselves can be known. Whatever is known, is known as filtered through space and time which are the universal forms of perception, and later on is conceptualised by the twelve categories of the understanding. However, phenomenal objects alone are known. Matter or material objects do appear to us to be external to us and to be independent of our minds. But all objects, being phenomenal are *formed* by the mind. Even when they appear to be external they do so by virtue of being spatial. But certainly space itself is in us.

Matter, therefore, does not mean a kind of substance quite distinct and heterogeneous from the object of inner sense (of the soul), . . . the representations of which we call outer as compared with those which we count as belonging to inner sense, although like other thoughts these outer representations belong only to the thinking subject. They have, indeed, this deceptive property that, representing objects in space, they detach themselves as it were from the soul and appear to hover outside.<sup>1</sup>

Hence, Kant has cleverly hinted that nature is the 'other' of mind and is not as such refractory to the mind. Thus, the fourth paralogism, concerning the ideality of self, contains pregnant statements for the development of subsequent idealism.

### **8.29. The Antinomies**

Just as the immortal soul cannot be *known*, so the world as a whole or as an ultimate reality, being suprasensible, is not known. Nonetheless the mind attempts to know all the objects comprising nature. This is simply a pseudo-problem and leads to mere transcendental illusions. The illusions may be called antinomies which have their 'content the unconditioned unity of the objective conditions in the field of appearance'. There are four antinomies according to quantity, quality, relation and modality which respectively refer to fourfold problems of *composition*, *division*, *origination* and *dependence of existence*. Both the thesis and anti-thesis are formally valid and can be proved with equal show of reason. None-theless they are opposed and inconsistent with each other. Here, again, Kant shows that there are only four antinomies:

1. PR, p. 198 vide p. 194f.

### **QUANTITY-THESES**

*The world is limited in time  
and space*

If the world was not created then it will become eternal. If it is eternal, then it means that an infinite time has already elapsed which is impossible. Time is a flowing series and as such at no stage it can be said that the series has attained infinity which would mean the end of the series.

Hence the world has been created.

Again, if the space is not finite, then it is infinite. But space being perception, infinite space would mean that an infinite number of things can be perceived at once. But this is absurd.

Hence the world is limited both in space and time.

### **QUALITY-THESES**

*Nothing exists but the simple*

If composite substances do not consist of simple parts then with the destruction of the composite substance, everything will be destroyed. This would go against the tested law of the conservation of matter and energy. Hence there can be a change of forms, but no destruction of all things. But composition is only accidental and the elements alone are real.

### **RELATION-THESES**

*There is a free cause and  
everything is not determined.*

If everything has a cause then we will go on backwards till infinity. But if everything is determined, then there can be no *first beginning*. But without the first beginning there can be no

### **ANTI-THESES**

*The world has no beginning and  
is not limited in space*

If the world is limited in space, then it is limited by something other than space, i.e., vacuum. But an empty space can limit nothing. Hence the world is not limited.

Again, if the world had a beginning then it means that there was a time when the world was not. But a time in which there is nothing is void. But the void is non-existent and in it nothing can originate.

Hence the world is not limited in time or space.

### **ANTI-THESES**

*There exists nowhere in the  
world anything simple*

If there is anything simple then it must exist in space. But anything in space contains parts external to each other. Hence there can be nothing partless or simple in the world.

### **ANTI-THESES**

*There is no free cause and  
everything is determined*

If there be a free cause then anything will produce anything. This will make everything impossible. Thus there can be no free cause and everything is determined.

sufficient cause for anything and this contradicts the law of causality itself.

Hence there must be a free cause to originate the world-series.

#### MODALITY-THESIS

*There is a necessary being in the world*

The world contains a series of changes. The existence of every change presupposes a complete series of conditions up to the unconditioned. Hence something unconditioned or necessary must exist in order to explain any change.

Further, this necessary being must be in the world for only a being in time can originate a temporal series.

In the antinomies there is no formal fallacy and yet there is an opposition between them. This shows that human understanding trespasses its limitation and ventures beyond into the unknowable. This proves that valid knowledge is confined to the phenomena and must not be extended beyond into the noumena. Again, the first two antinomies, called mathematical, are too inadequate. Either they are too wide or too narrow. Hence they are false. But the dynamical antinomies arising from relation and modality can both be true, in different contexts. The phenomenal world is determined but the noumenal world may be free. "Without unbroken causal connection, there is no nature; without freedom, no morality; without a Deity, no religion."

Antinomies show that nothing in the empirical discovery can be regarded final. The idea of the world constrains the understanding to find out the further term in the series.

#### 8.30. Functions of the Cosmological Ideas

As both thesis and anti-thesis, according to Kant, are formally valid, so we cannot decide in favour of either side. All that can be inferred is that in relation to our speculation concerning cosmological matters, we seem to be at the end of the tether. They mark the limit of our knowledge. However they have also some regulative functions to serve and they can be thus noted:

(a) These together may form a dogmatic side of our philosophy. Dogmatism in this sense has importance, for guarding, sustaining and furthering the *practical interest* of man. In general theses maintain that there is a *primordial* being who has created the universe with a design for evolving creatures worthy of his fellowship. These dogmatic affirmations uphold the foundations of morals and religion.

(b) These have the function of furthering *speculative interest* as well. By postulating the beginning of the universe, along with eternal (simple) creatures

#### ANTI-THESES

*There is no necessary being in the world*

Everything in the world is in time and being phenomenal is conditioned. Hence there cannot be anything unconditioned.

If the necessary being be out of the world and time, then being a non-temporal entity cannot originate a temporal series.

Hence there is no necessary being.

(men) by a primordial being.

The entire chain of conditions and the derivation of the conditioned can be grasped completely *a priori*.

Hence, the cosmological enquiries escape from fruitless *regressus ad infinitum*.

(c) These are supported to a great extent by commonsense and has the advantage of *popularity*. Hence, they guide the practical and theoretical interests of ordinary men and afford philosophical comfort and religious consolation to them.

Therefore, the theses serve an architectonic interest of philosophy by yielding *a priori* unity of reason.

Anti-theses arise from an empirical temper of the mind, according to Kant. They hold that there is no primordial being as distinct from the world, that there is no beginning of the world and that man's soul is perishable and determined. Such views do not support the practical interest of men.

However, the anti-theses fully compensate for the above-mentioned disadvantage with regard to morals and religious values. They offer far greater advantages concerning the *speculative interest* of man. They limit knowledge proper to genuinely possible experiences, investigating their laws and afford indefinite extension to sure and comprehensible knowledge. They encourage the study of nature and discourage deviations into supernatural investigation and specious forms of knowledge with regard to supernatural laws.

If the empiricist, holding anti-theses, is satisfied with this important task of urging moderation in our pretensions, of maintaining modesty in assertion and of encouraging empirical investigations of nature, then nothing but good would result. If kept within restraint, the antitheses would maintain only this much that there is no scientific knowledge of the creator of the world or of the eternal soul. But this cautious assertion does not cut off the ground of *faith* with regard to these entities. However, empiricism is likely to develop into a dogmatic temper and as such may confidently deny the reality of the supersensible. In doing so empiricism would lack the same modesty which the theses seem to encourage and would also do harm to the cause of morals and religion.

#### 8.31. Antinomies and Hegel's Dialectic Method

Hegel is as much indebted to Socrates and Plato for getting hints for his dialectic method as he is to Kant. First a careful scrutiny of Kant's list of the categories would show that the third category in each of the fourfold classifications is a synthesis of the former two categories. For example, totality is plurality regarded as unity. Thus, the first two categories may be treated as thesis and anti-thesis, inviting a synthesis. Secondly, the antinomies give another hint in relation to the development of the dialectic method. Here the thesis and anti-thesis are strongly contrasted, yet they appear to be true as well. Kant did not think that any synthesis is possible. Here

Hegel was itched into thinking. According to Hegel, so we surmise, Kant could not reconcile the antithetical claims of the antinomies, since Kant confined himself to the *understanding* which deals with the static laws of non-contradiction. However, Hegel urged that *speculative reason* can proceed ahead, because of the contradictions, towards an all-harmonious and all-inclusive Absolute through a dialectic advance.

### 8.32. The Ideal of Pure Reason

The ideal of reason is not a mere idea, but is an ideal. It contains the sum of all possibility. The ideal seems to be farther removed from objective reality than the ideas of the world and soul. Further, this ideal refers to an individual, popularly known as a personal God.

By the ideal I understand the idea, not merely *in concrete*, but *in individuo*, that is, as an individual thing, determinable or even determined by the idea alone.<sup>1</sup>

In other words, the transcendental ideal seeks to prove the existence of God with the help of pure concepts alone. Kant states that there are three and three proofs only for proving the existence of God, namely, ontological, physico-theological and cosmological. However, later on, he shows that physico-theological<sup>2</sup> proof tests upon the cosmological which in turn leans upon the ontological proof.<sup>3</sup> Hence, Kant pays special attention to the ontological proof and his refutation is even now repeated by standard authors of theology.

### 8.33. Ontological Proof

'Ontos' means essence. Hence, by the ontological proof is meant that 'existence' is the very essence of the idea of God. In other words we cannot think of God except as an existing being. The existence of God follows necessarily from his idea in the same way in which the three sidedness follows from the very definition of a triangle.

The ontological proof was fully developed by Anselm, Descartes and Leibnitz. We have already referred to the Cartesian treatment of the ontological proof. We would now follow Kant's refutation of the ontological argument.

First, there is a transgression here of linguistic usage. God is said to be an absolutely *necessary being*. But 'necessary' is used with reference to propositions and not with reference to 'things' or 'beings'.

All the alleged examples are, without exception, taken for *judgements*, not from things and their existence. But the unconditioned necessity of judgments is not

1. PR, p. 269.

2. Popularly known a 'Teleological.'

3. PR, p. 298.

the same as an absolute necessity of things.<sup>1</sup>

Again, a proposition is necessary if its predicate cannot be denied without involving us in self-contradiction. For example, 'A triangle is a plane rectilineal figure bounded by three straight lines'. But in contrast to it, a synthetic proposition is that whose predicate can be denied without contradiction. This is true of every empirical proposition e.g., 'This table is brown'. We can always imagine this table to be of a different colour from what it is. Now if 'existence' is a predicate of God in an empirical proposition, then we can always imagine it to be different from what it is. Hence, the concepts concerning a "necessary being" are self-contradictory.

But if, on the other hand, we admit as every reasonable person must, that all existential propositions are synthetic, how can we profess to maintain that the predicate of existence cannot be rejected without contradiction? This is a feature which is found only analytic propositions, and is indeed precisely what constitutes their analytic character.<sup>2</sup>

Besides, Kant holds that 'existence' is not a real predicate. It is a mere sign of the copula in a judgment. The word 'is' adds no new predicate.<sup>3</sup> By mere 'thought' or 'concepts' we cannot bring anything into existence. If thoughts were things, beggars would ride horses, nay, all will be kings and there would be no serfs. The concept of God remains a concept, no matter how hard we think about it.

Later on Caird wanted to rehabilitate the ontological proof by holding to the Hegelian doctrine of the inseparability of thought and things. He pointed out that God is such an idea that it guarantees its own existence. If it were not so, every possibility of thinking would cease. Kant seems to have anticipated this defence of the argument.<sup>4</sup> His reply to this plea is:

My answer is as follows. There is already a contradiction introducing the concept of existence—no matter under what title it may be disguised—into the concept of a thing which we profess to be thinking solely in reference to its possibility."<sup>5</sup>

### 8.34. Cosmological Proof

Often it is maintained that the ontological proof fails simply because it is *a priori* proof for the existence of a being. However, existence is given in our experience. So it is argued that only proof which starts at least from experience can succeed

1. PR, p. 279.

2. PR, p. 281.

3. PR, p. 282.

4. PR, p. 280f.

5. PR, p. 281.

in yielding the existence of God. Now the cosmological argument in this relation proposes to make good the deficiency of the ontological proof.

The cosmological proof has its starting point in the contingency of the world. Every phenomenon is conditioned by its antecedents and they in turn by their own antecedents. The chain extends to infinity. But no matter how far we extend backward, we can never catch the total causes or antecedents of phenomena of the world. Hence, in order to explain this contingency of the world we are forced to assume the reality of an uncaused cause or a necessary being at the basis of the world.

**Criticism:** Though the proof proposes to start from experience, yet its claim in favour of experience is spurious. The proof is concerned with only one characteristic of the world in general, namely, its contingency. It is not concerned seriously even with the aspect of the world. Its sole aim is to conclude the existence of a necessary being. But the contention concerning the necessary existence of God in ontological argument is repeated once again. Hence, the appeal to experience concerning the contingency of the world is merely a show of empirical proof. It is as much conceptual as the ontological argument.

Again, the contingency of the world is sought to be shown with the help of the principle of causality. However, the principle has no meaning to the supersensible world. The concept of a first cause, which in itself cannot be explained in terms of causality at all. From the premises forming a causal series (or caused causes), we cannot infer the existence of an uncaused cause. It appears that the conclusion is not at all contained in the premises. From contingency we can infer contingency, and not its opposite, namely, necessary being.

**Conclusion:** The truth is that it is legitimate to *admit* the existence of an all-sufficient cause or Being to assist reason in its quest for final unity, yet we cannot assert the existence of such a Being.

### 8.35. Physico-theological Proof (Teleological Proof)

The cosmological proof has only an empirical touch. It appeals to highly abstracted quality of contingency of the empirical world. In contrast to this, the physico-theological proof refers to a specific characteristic of the world, namely, its order. The argument starts from the variety, order, purposiveness and beauty which are found in nature in general as well as in its infinite details. From this it is inferred that there is a design and therefore there is a supreme Designer or Intelligence who has created the world. The several steps in the argument can be thus outlined.

- (a) There is order in the universe, indescribably varied in content and unlimited in extent.
- (b) This order is quite alien to the world and has been introduced into it contingently, for the fulfilment of determinate final purposes.
- (c) The whole of the infinite order can be explained with reference to a design.

As the order is infinite, so the cause or author of this design must be an infinite intelligence.

Kant considers this physico-theological proof to be as untenable as the other two previous ones. However, he thinks that this proof strengthens the belief in the supreme Author with an irresistible force.

This proof always deserves to be mentioned with respect. It is the oldest, the clearest, and the most accordant with the common reason of mankind.

It also encourages the scientist to study the details of nature with enlivened interest. But in spite of these practical and theoretical advantages, the proof fails to establish the existence of God.

### 8.36. Criticism

1. This proof at most is *analogical*. It is based on the analogy of a mechanic in relation to its machine or of a pot in relation to a potter. This, therefore, has no force of demonstration.

What is the guarantee that the world in its infinite wealth of details is not full of blemishes, ugliness and disorder? Who can speak of the world as a whole?

Since the time of Kant such questions have multiplied and thinkers have not been slow in pointing out many cases of imperfection in the world. John S. Mill, J. Laird, J. Mackie, McCloskey have elaborated the objection against the argument from design on account of unaccountable evil in the world.

2. This proof at most shows that there is an *Author* of the world, but it does not show that there is a *Creator* of the universe. An architect is one who shapes and moulds something out of some pre-existing material.<sup>1</sup>

For example, a potter makes a pot out of pre-existing clay. An architect, therefore, co-exists with his material. Therefore, even an infinite architect presupposes the reality of matter which he, by his intelligence, fashions into an orderly universe. This means that God becomes *limited by matter*. However, creator God must be infinite and must create matter also out of himself.

3. This proof is really a disguised form of cosmological argument.<sup>2</sup> The second step in the argument assumes that the world of itself cannot give rise to the order that we behold with speechless wonder. Hence, the argument assumes that the order is contingent and requires therefore an external machinery to account for it. But who knows that the world by itself as given rise to this order by mere fortuitous combinations and permutations of its various elements?

1. PR. p. 296.

2. PR. p. 294, 297

Kant could have not been aware of Hume's argument in favour of self-regulating and self-ordering universe. But since the time of Hume and Kant, the view of a self-regulating universe has gained ground, largely under the influence of the theory of Cosmic Evolution. The theory of mechanical and *natural* selection in nature is supposed to be sufficient to account for the adaptation of means and ends. Anything that will not be adapted, of itself in the struggle of existence for the survival of the fittest would go out of existence.

Now if the order in the universe be not contingent, but implanted in it, then the question concerning the author of this orderly universe does not arise. Like Laplace, we can say, we have no need of an hypothesis concerning author of the universe. The universe by itself is self-explanatory. Hence, we have to add that any order in the universe is contingent and ultimately is grounded in an infinite Intelligence or Mind. But then it becomes a form of cosmological proof.

Thus the physico-theological proof, failing in its undertaking, has in the face of this difficulty suddenly fallen back upon the cosmological proof; and since the latter is only a disguised ontological proof, it has really achieved its purpose by pure reason alone. . . .<sup>1</sup>

### 8.37. The Value of Transcendental Theology

The transcendental theology has a great deal of negative value. It rebuffs all attempts to know anything with the help of empty concepts alone. No idea can validate its own existence.

But if God cannot be proved, it cannot be disproved either. So the reality of God is safe in the ivory tower of faith, against all attacks of atheism, deism and anthropomorphism. If positive assertion concerning God is not possible, then counter-assertion against the reality of God is equally futile.

God, therefore, has a rightful claim for being an object of faith, the justification for which comes from moral life. Apart from this practical gain, it affords speculative satisfaction to our intellectual needs. True, God is a mere *ideal*, it is yet an ideal, without a flaw which completes and crowns the whole of human knowledge. (PR, p. 299)

### 8.38. Functions of the Three Ideas of Pure Reason

The *transcendental dialectic* has shown the impossibility of knowing the three regulative ideas of soul, World and God. If he were to dramatise his statements, he would say:

2. PR, p. 297.

Thinkers! Some of you are just like the mariners. You know that as long as you are on the island, you are safe from wind, storms, fogs, icebergs and ship-wrecks. But you are the sailors. You have drunk of the sea. You know that the storm is raging and the sea is befogged and the lurking icebergs are beneath. Ship-wreck is certain. But you have smelt the sea. You cannot but unfurl the sail of your ship. Should I congratulate you on your venture for the unknown? Lo! I am silencing the sirens, but I cannot cure you of their charms. Now bush and speak no more.

The Transcendental Illusions have shown that there is nothing real corresponding to the ideas of reason. But then these ideas have certain functions to perform:

1. They point out the model knowledge, the highest unity of which our reason is capable. Their use is not immanent for they do not constitute knowledge; but they are transcendent inasmuch as they guide the understanding to clearer and wider knowledge.

2. They are the limiting concepts pointing out the utmost reaches of knowledge beyond which we must not venture.

3. They regulate the understanding by pointing out the ideal of knowledge. Sense and understanding can guarantee the actual, i.e., *what is*; but reason points out the existence of what *ought to be*.

4. Quite true, the reality of God, the immortality of soul and the freedom of will cannot be proved and known but they cannot be disproved either. They are unknowable and the doubt about their reality is as indefensible as the dogmatic assertion about them. Kant thus speaks about the dogmatists and the sceptics: "Both parties to the dispute beat the air; they worry their own shadow for they pass beyond nature to a region where their dogmatic grips find nothing to lay hold of." Thus where the ideas of religion and morality, Kant throws the magic fog of invisibility. Therefore, the sword of the sceptic and battering-ram of the materialist fall harmless on vacuity.

5. Lastly, the ideas pave the way for faith in morality and religion. As a matter of fact it is the need for morality that keeps the transcendental illusions.

### 8.39. The Critique of Practical Reason

Kant was above all a moralist and a theist. He knew that people believed in God and moral goodness because they have faith in them and not because of any abstruse arguments of the philosophers. No doubt *The Critique of Pure Reason* has shown that any knowledge of the suprasensible is impossible, but then any disbelief in them is equally untenable. On the other hand the demand of the will shows that we are justified in having belief in them. Hence the critical point of Kant puts three questions : What can I know? What ought I to do? What may I hope for? Of course, we cannot know the existence of God or the immortality

of soul but we can fairly hope for both of them.

The Kantian doctrine of morality depends upon the examination of the moral consciousness of 'ought'. For example, what is implied in such proposition, we ought to repay the debt or we should be honest? Now 'ought' or 'should' implies that we can do otherwise than repaying debt or becoming honest. This means that there are alternatives which we are free to choose. But this freedom in moral consciousness implies that we are not the phenomenal self only, for the phenomenal self of sensibility is always determined. This freedom to choose indicates that as far as we are moral we belong to the noumenal self. In morality, therefore, there should be nothing of the sensibility or phenomenal self but it should be guided by the noumenal self or the rational self alone. Hence in morality the individual is guided by nothing except by his rational self and as such he is autonomous. As in the determination of objects the understanding gives laws to nature, so in morality the reason prescribes laws to itself alone.

Kant tries to find out the universal and necessary objects as the motive of will. Universal and necessary objects simply mean the *a priori* forms of determining the will. Hence Kant tries to find out the purely formal motive of moral consciousness. He finds out the good will as the only *a priori* motive of action. Nothing in the world, or even outside the world, can be regarded as good except a good will. Honour, wealth or even health can be prostituted to base ends if the will to use them be not itself good. Hence only a good will, without any qualification, is good and like a jewel shines by its own light. A good will coming from the rational self should have nothing of desire and pleasure. A good will is good not because of consequences for it might be that a niggardly provision of a step-motherly nature may frustrate the result. It is absolutely good in itself.

Again, being purely *a priori* not only a good will should be independent of all desires and pleasurable consequences but then it should also be universal. As such Kant lays down the maxim that "so act as if the maxim from which you act were to become through you will a universal law of nature." Hence any action which cannot be universalised is not *a priori* moral action.

Good will is an end in itself for it comes from the noumenal self of which the phenomena are. But everything in the phenomenal self is only an instrumental good. Name or fame or even health is not good in itself. As such the moral consciousness tells us to obey it unconditionally or categorically. Again, the demand from the noumenal self being *a priori* is of the nature of command or imperative. Hence morality lies in the obedience to the categorical imperative. Thus we have to surrender ourselves unconditionally to the dictates of the categorical imperative, without any hope of reward or fear of punishment. There should be no consideration for sensibility or the desire for pleasure. Any consideration for the phenomenal self will take away the moral worth of the actions. Hence Kant illustrates moral actions by examples which show that they are independent of and may even go against sensibility. The action out of the pure

regard for the moral law, independent of any desires, but which is valid for all persons is known as duty. Now Kant points out that we should act for the sake of duty only. Pure duty is unmistakably seen in actions against impulses. If a man lives because it is natural in him to do so, then duty is not well marked out. But if a man keeps himself alive even when despair and misfortune have taken away all zest for life, then we can say that in his self-preservation he is following duty. One gets the impression here that Kant is teaching that duty is necessarily disagreeable. But this cannot be the meaning of Kant. Kant holds that man, being both phenomenal and noumenal is guided both by impulses and reason. Insofar as an act is determined by impulses yielding pleasure, it is not moral at all. Only when an act is motivated by reason, then alone it can be said to be moral. Here, in the above instance, Kant is trying to bring out the nature of pure morality, untarnished by sensibility.

It would be wrong to maintain that any act actuated by impulses, desires and feelings become immoral. Here the critics of Kant quote the sarcastic lines of Schiller:

Kant would not regard an act promoted by affection to be immoral. As a matter of fact, an act can be motivated by sensibility as well as by reason. Charity may be prompted by friendship as well as by a sense of duty towards needy fellowmen. However, the moral excellence of an act, according to Kant, is determined by reason alone, and, not by passion.

If Kant had taught duty to be bereft of pleasure, then he would not have thought of the ultimate reconciliation of happiness and duty. Ultimately, according to Kant, impulses have to be made holy being transformed by reason.

Of course, Kant was trying to find out the *a priori* conditions which determine morality, irrespective of the material circumstances of the situation. Naturally Kant's enquiry was transcendental and formal. It would be, therefore, out of the mark to hold that Kant has not taught us what our specific duties are under particular circumstances. Kant has thought us this much that if the will or character has been hallowed and made rational, then a person can very well perform his duties.

There is nothing in the world, nay, even beyond the world; nothing conceivable which can be regarded as good without qualification, saving alone a good will. . . . A good will is good, not because of the consequences which may be frustrated by a niggardly provision of a step-motherly nature. A good will is good in itself, and like a jewel shines by its own light.

In spite of the formal and rigorous character of Kant's morality there are points of lasting contributions to Ethics. First, Kant teaches that each man is an end in himself. As long as we act out of the pure regard for the moral law we are acting from the viewpoint of the noumenal self. But the noumenal self is the highest self, the supreme end for which the phenomena are. Hence each moral person is a true end in himself. Thus he lays down: "Act so that you treat humanity, in your own person and in the person of everyone else, always as an end as well as means but never merely as a means." Thus on this principle slavery in any form is unacceptable moral law.

Secondly, Kant teaches universal brotherhood. So far as we are moral we belong to the noumenal or ideal kingdom and not to the phenomena. The phenomenon is a kingdom of means for nothing here is its own end; but a noumenon really is the kingdom of its own end. So we are all fellow citizens of the intelligible kingdom of ends.

#### 8.40. Primacy of Practical Reason

*The critique of Pure Reason* shows that the scientific knowledge of God, World and Soul is not possible. *Paralogisms* show that soul cannot be said to exist independently of the body; *antinomies* show that the freedom of will cannot be discursively established; and *Ideals of Reason* make it clear that God's existence cannot be demonstrated. From these negative conclusions it does not follow that there are no noumena. Kant did not deny their existence and so he was not a sceptic. However, he held that there are noumena: only we cannot have empirical knowledge of them. Hence, Kant is said to be *agnostic*. Now, Kant goes a step forward. He states that the problems concerning the supersensible at least can partly be solved through practical reason. For him, the freedom of will, the immortality of soul and the existence of God are moral postulates. As morality has to be accepted, so these postulates which alone guarantee its possibility have to be taken as plausible objects of faith. He also gives reason for not treating this supersensible objects as illusory. He would maintain that to the extent a person is moral he belongs to the kingdom of ends or *noumena*. But the theoretical reason at most can establish the validity of phenomena alone. Hence, Practical Reason dealing with noumena is to be considered higher than theoretical reason. It is the demand of practical reason which makes theoretical reason think of them. Besides, the existence of moral postulates is compatible with phenomenal existence and the two need not be opposed. Again, morality has to be accepted as a fact and therefore all the conditions which make morality possible, must be granted as valid. God, soul etc., are precisely the conditions which make morality possible. Hence, instead of being treated as useless phantasies, they have to be granted as valid possibilities. Therefore, Kant points out: "I was obliged to destroy knowledge in order to make room for faith."

'Faith', for Kant has a moral and a pietistic suggestion. It shows that Kant used the term 'reason' in a much broader sense than mere cognition. The importance of Practical Reason and Judgment implied for Kant the recognition of non-discursive mode of apprehension.<sup>1</sup> Further, Practical Reason gives one the apprehension of the self as 'free', which cannot be scientifically cognised.<sup>2</sup>

First, the freedom of will is the most important and direct postulate of morality. The categorical imperative or 'ought' implies that we are free to choose between two possible courses of action. If we are not free to choose, then any act becomes absolutely determined. And if I cannot act otherwise than what I do, then there will be no room for blame or praise and consequently there will be no meaning of 'ought.'

Immortality of soul and the existence of God are only indirect postulates of morality. Kant makes a distinction between Supreme Good and Complete Good. Virtue indeed is the chief good but it does not contain any element of happiness. However, the complete good should also include happiness and this is not a dogmatic statement but results from the moral demand itself. It is a moral demand that the just must not remain in miseries. But happiness arises from the satisfaction of desires and as such it belongs to the phenomenal self. Hence virtue and happiness are heterogeneous and they cannot be related analytically. A synthetic connection is possible if we believe that one is the cause of the other. But in actual life we find that the virtuous are not rewarded with happiness. Hence, they are united together only by the author of our being, an author of both of our phenomenal and noumenal nature. Hence, we must postulate the existence of "a Being who is quite distinct from nature, and at the same time the cause of it and who contains in himself the ground of the realisation, i.e., of the realisation of the combination of happiness with virtue." Kant, however, is careful in pointing out that the existence of a moral governor or judge is only a moral necessity and is not an objective fact. We must so act as if there is a moral governor who will unite virtue with happiness in the noumenal world.

Lastly, holiness is the supreme end of moral will. But in this life we can never be holy for our action is never out of pure reason only. The struggle of reason continues with the senses and the struggle is only partially won. We must postulate an infinite series of life in which the senses are completely overcome and perfect holiness results. Hence there must be an immortality of soul to give meaning to our moral struggle. Hence we must so act as if there is a life beyond. Of course, 'the immortality of soul' can now be demonstrated but is "an inseparable corollary of an *a priori* unconditionally valid practical law."

Immortality and God are only indirect postulates of morality, for moral law is autonomous. They are only objects of faith. Thus we find that the metaphysical

1. *Masterpieces of World Philosophy*, edited by F.N. Magill, p. 549, Col. I.

2. *Ibid.*, p. 549, Col. 2.

problems of God, soul and immortality were raised in *The Critique of Pure Reason* but only the practical reason partially solves by showing them to be the necessary postulates of morality.

#### 8.41. Phenomena and Noumena

Kant emphasises the role of *a priori* activities of the mind in having knowledge proper from the manifold of sense-impressions. He accepts the assumptions of the moderners concerning the discreteness of the manifold data of the sensibility. There is little doubt then that without the transcendental synthesizing activities, according to Kant, there can be no knowledge proper. But Kant never leaves behind him the firm ground of empiricism in order to build a rationalistic edifice in the air. According to him by the employment of mere synthetic unity of apperception through the twelve categories of the understanding there can be no knowledge. Concepts without percepts are empty. Percepts must be supplied to the understanding in order that they may become *objects* proper. Here he adds also that space and time are pure percepts. They are not empirical intuitions or perceptions. For him the presence of empirical intuitions are necessary to constitute knowledge.

But because understanding gives laws to nature, therefore, there is the danger of speculating that there can be knowledge by the understanding alone. We have already seen now that this is not the case. At least the transcendental illusions are there to remind us of this danger. But there might be an opposite mistake. True, all that we can say that knowledge must begin with experience, but should any experience be of the same type as ours? Is there not the possibility of another kind of intellect, which instead of waiting for the sensible matter being supplied to it, may create its own? Here Kant holds that so far as human beings are concerned, they have an active intellect or understanding but a passive sensibility. But there might be an *intuitive intellect* possibly of God that creates its own matter. Here mere thought of a thing is enough for the intuitive intellect to create a real objects for it. For example, according to the Bible God said, 'Let there be light, and there was light'. But for human being mere wishing, even a hard one, is not enough to have objects. So without sensibility there can be no knowledge.

Now the question arises, Do we perceive the objects as they are? Not at all. Here we have to guard ourselves, according to Kant, both against materialistic realism and subjective idealism. According to Kant, the manifold of sensory data are discrete. But whatever we know is at once ordered and organised. First, the manifold data are at once brought under the forms of space and time. Unless we time and space the discrete manifold of sensory data we cannot empirically perceive any object at all. However, this *a priori* condition of perceiving the manifold for ever shuts us from knowing the sensory data as they are in themselves, in their naked forms, without being clothed by space and time.

We do not stop at two *a priori* forms of space and Time. We place the spaced and timed sensory data called percepts into another operation chamber of the understanding. Here the twelve categories of the understanding further order and synthesize the percepts into judgments. The net result is that without the concepts there can be no objects, for percepts as percepts become objects of knowledge when they are subjected to the categories. But these operations, so alien to the sensory data themselves, disguise the real nature of the objects. Objects of knowledge, therefore, are objects to us as they appear to us. Of course, what their real nature is, apart from *a priori* forms of sensibility and the twelve categories of the understanding, we have to means of knowing. Should be way: Things are as they appear to us and there are no things-in-themselves apart from the phenomena?

This is what Berkeley, according to Kant, had taught. According to Berkeley things are but our ideas. In other words, ideas within the consciousness of a thinker are alone objects, and there are no objects besides the ideas. Kant offers two kinds of refutation of this form of subjective idealism.

(a) First, pure perceptions, also called *a priori* forms of perception (space and time) by themselves though precede all objects yet even this intuition of space and time is not objective. It can acquire its object and objective validity only through empirical intuition. Hence, for Kant, the data must be given and no empirical objects can be created by intellect alone.

(b) Secondly, Kant states that all instances of temporal succession require something relatively permanent. For example, the movement of the sun is perceived in relation to some relatively permanent objects of this earth. Now our own selves are perceived as an aggregate of successive changes. Here Hume and Kant both agree that the empirical self is a bundle of passing mental processes. If the self is perceived as a bundle of successive changes, then there must be something relatively permanent in relation to which it is felt to be in a temporal flow. This relatively permanent something is bound up with the existence of outer things. Unless there be something relatively permanent outside of us, with which to compare and contrast our passing sensations, we shall not experience ourselves as bundles of successive changes.

In other words, the consciousness of my existence is at the same time an immediate consciousness of the existence of other things outside me.<sup>1</sup>

In the above contention, Kant has turned the table against idealism. According to subjective idealism, the immediate experience is inner experience and outer objects are merely constructed out of it. Against subjective idealism and even against realism, Kant points out that immediate states of consciousness themselves are not possible without the consciousness of outer things. Here Kant shows

1. PR, p. 138.

the immediateness of outer experience and only in relation to it, according to him, inner experience is possible.

Of course, the consciousness of 'I am' or the synthetic unity of apperception which accompanies every item of our knowledge of objects is only an *a priori* logical condition. This is never *known*. So the only empirical self which we know is a bundle of successive changes. And this kind of self is not possible without reference to outer things. In this contention of Kant much food for thought is contained, which was fully exploited by Fichte, Schelling and Hegel.

If the forms of sensibility and the concepts of the understanding be constitutive of objects, as objects of knowledge, then this view supports what Kant has termed Transcendental Idealism. According to this view subjects are objects within phenomena and we can never style them as things-in-themselves. Of course, we have full scientific knowledge of the phenomena. Yet we cannot assert that only phenomena are and noumena are not, or that any talk of noumena is self-contradictory.

'Noumenon' for Kant has purely *negative* sense. The term means a thing so far as it is *not an object of our sensible intuition*. The term may acquire a positive sense when it refers to an object of a non-sensible intuition. It may mean that a noumenon is an object of knowledge, possibly for an intuitive intellect. However, the notion of an intuitive intellect is only problematic and human intellect can say nothing about it. Human knowledge cannot know non-sensible objects. We cannot legitimately apply to them the concepts of existence, causation or even of 'non-existence'. Hence, for Kant 'noumenon' stands in *negative sense only*.

Since no category of our understanding can apply to 'noumenon', should be discard the term? Kant would say 'no'. The notion of a noumenon is necessary to prevent sensible intuition from being extended to things-in-themselves. But the limit of knowledge is not the limit of thought. We can think about the noumenon for marking out a possible limit to knowledge proper. Therefore, for Kant, noumenon is an *empty* or a limiting concept with a view to curbing the extension of sensible knowledge and it can admit of negative employment only.

Thus, the concept of noumena, for Kant, served the purpose of guarding philosophy from the errors of subjective idealism, materialism and even realism. But in due course there were many things in Kant's philosophy which paved the ground for *objective* Idealism.

#### 8.42. The Hegelian Criticism of 'the Unknowable'

Hegel was not satisfied with the limiting of knowledge to phenomena only. With his 'unearthly ballet of bloodless categories', he hoped to know the *things-in-themselves* too. He could achieve this by removing the distinction between

1. PR, p. 138.

phenomena and noumena. For him noumena are as much objects of knowledge as phenomena. For reaching this result, Hegel has tried to show that the concept of the unknowable is self-contradictory.

For Kant, 'noumenon' is only an empty concept. We know *that it is*, but we do not know *what it is*. 'The what' is matter or content of a concept, which (matter) is supplied by sense alone. As a noumenon is beyond sensibility, so it is beyond knowledge proper. However, even Kant could not confine himself to the negative sense of the noumenon. At times he spoke as if the unknowable things-in-themselves were the causes of sensibility and understanding.<sup>1</sup> Further, though, according to Kant, no knowledge of noumena is possible, yet they are the proper objects of faith. Therefore, for Kant the notion of a noumenon is not merely negative, nor is it purely empty. Hence, his doctrine of the unknowable came to be criticised by Hegel.

Hegel observed, if the unknowable is beyond every kind of knowledge and, if it is beyond the legitimate use of the concepts of the understanding, then we cannot apply the concepts of causation, reality and existence to it. Inasmuch as we say that a noumenon *is*, we are applying the concept of 'existence' to it. And inasmuch as this statement is true, we are knowing it to that extent. Might be that our knowledge of the noumenon is scanty, but we cannot say that there is no knowledge at all.

Again, Hegel proceeded, we cannot escape from our responsibility of knowing by stating that the term 'noumenon' is a limiting concept. To be aware of a limit is to go beyond it. No one could be aware of the end of the edge of a table without getting aware of an empty space surrounding it. Hence to say that we know that noumena form the limit of knowledge is to *know* this limitation. If we know nothing about the noumena, then we would not say even this much that they exist. Total nescience implies total unawareness. Hence, to say that a noumenon is and yet not to know anything about it, for Hegel is self-contradictory.

Hegel's criticism appears to be unjustified. Hegel did not seem to take seriously Kant's distinction between *knowing* and *thinking*. The unknowable can be thought, but without being given in sensibility cannot be known. Further, objects of *faith* are not necessarily objects of *knowledge*. In current language, we can say that for Kant, the unknowable does not form part of any cognitive meaning. But it may have emotive, persuasive, numinous or imperative meaning. In our language we have stated that metaphysical statements have holistic meaning. So Kant's doctrine of the unknowable has important implication and is not as self-contradictory as Hegel and Hegelians have contended.

#### 8.43. Kant and Current Empiricism

Much in the writings of Kant reminds us of current empiricism having various forms, called logical empiricism, logical positivism, linguistics etc. Like

1. PR, p. 38.

contemporary analytic philosophers, Kant makes a distinction between philosophy and metaphysics. He too would regard metaphysics, as the science of the supersensible, as impossible. Kant too limits knowledge to the observable or the perceptible. He too maintains that the function of philosophy, which he called 'transcendental critique' is not to *extend* knowledge, but only to *correct* it.<sup>1</sup> And yet there is hardly any contemporary logical positivist or logical empiricist who would not take Kant to task. For example, Russell doubts whether Kant was really roused from his slumber by the writings of Hume. And if he was so roused, so Russell continues, he took to soporific again, of his invention.<sup>2</sup> Similarly, a great many positivists contend that Kant's problem, which was centred round the possibility of *synthetic judgments a priori*, is a pseudoproblem.<sup>3</sup>

Strictly speaking Kant does commit a great many mistake. But in a history of philosophy a thinker is to be judged by his intent and not so much by his literal statements. Kant is to be judged not so much by what he has said, but by what he intended saying. There is hardly any great thinker whose statements do not contain much more than what he could have clearly stated. In the same way, Kant has to be interpreted sympathetically with the help of a great many emendations. However, these emendations are not so many thoughts alien to Kant, but are really present in his writings which the philosophical language of his times could not permit to be clearly stated.

True, Kant has to be given credit for drawing a clear distinction between analytic and synthetic statements which were vaguely held both by Locke and Hume. But it must be confessed that his treatment is often defective and confused. His treatment is based on the containment theory of the subject-predicate relationship in a proposition. This theory besides being metaphorical, often takes recourse to the familiarity of the connotation. Hence, this introduces a psychological element, when the distinction should be strictly logical. We have already referred to the presence of psychological elements in the synthetic judgments *a priori* in mathematics (8.07). However, these defects are comparatively minor. In the days of Kant, propositions meant those that could be explained in terms of subject-predicate relationship. Mathematical logic had not captured the imagination of the logicians. So Kant does not refer to propositions based on relations. With some modification the distinction between the analytic and synthetic propositions can be made adequate to meet the requirement of precise statement.

Again, before the Riemannian type of Geometry had been invented, it was considered that Euclidean Geometry was the only form of it. Kant shared the same view. He, therefore, thought that the Euclidean space was fixed and unalterable

1. PR, p. 38.

2. *History of Western Philosophy*, p. 678.

3. Richard von Mises, *Positivism*, p. 6 is only one out of many such criticisms.

for all human beings. The same thing may be said about the categories. He took certain forms of propositions to be fixed and unalterable. Naturally he took them to be *a priori*. To-day we would consider the views of *a priori* forms of perceiving and thinking as ill-conceived and erroneous, simply because we are heir to the researches and wisdom of scholars of many decades after Kant. But we would not have reached the conclusion concerning the categories or even about 'space and time' if Kant had not directed the thoughts of thinkers for all these days. The important thing was that Kant pointed out that without the categories mere empirical account of knowledge would not explain scientific knowledge. As Kant had taken the fixity of thought-patterns for granted, so he could not explain the nature of the categories except by assuming them to be *a priori*. To-day the empiricist explains the categories as conventions. Of course, there is a great gain in treating the categories as useful conventions and there is an escape from psychological mysticism in which Kant's account of *a priori* elements appear to be heavily enmeshed. Kant, in the last resort would fall on the sameness of the human constitution of thinking in order to explain the nature of *a priori* elements. But if we by emendations substitute the mental constitution by 'conventions', then Kant's account of knowledge can be suitably and easily reconstructed.

Most probably many such emendations can be introduced to show that Kant's thoughts are still living. However, the most central point of difference between the contemporary empiricists and Kant would be that for the former metaphysical propositions are nonsense, whereas for Kant they are not cognitive and yet are significant in a non-cognitive way.

#### 8.44. The Meaning of Metaphysics for Kant

For Kant, 'knowledge' meant 'scientific knowledge'<sup>1</sup> as was contained for him in mathematics and physics. His analysis of knowledge revealed that metaphysics is not capable of yielding scientific knowledge of God, soul and the world. Therefore, for Kant metaphysics as a science is not possible. But he laid down that metaphysics actually exists, if not as a science, yet still as *natural disposition*.<sup>2</sup> A thinker is driven to metaphysical problems by virtue of some inward need within him. In our current language, we would say that there is some extra-logical, often called psychological motivation by which metaphysics is initiated and sustained. As yet people have not fully stated the problem concerning the nature of that inner need by virtue of which some sort of metaphysics becomes a necessity for philosophers. What is important here to state is that at the beginning of the movement of logical positivism, Schlick, Carnap, and Ayer dismissed metaphysics as nonsense. Now Kant had as much reason for discarding metaphysics as these positivists had. But he did not. That does show a greater appreciation of the

1. PR, p. 36f.

2. PR, p. 36.

problem by Kant than by these empiricists. Later development has shown that after all metaphysics may have some non-cognitive sense, and, therefore, empiricists are trying to ascertain emotive, persuasive or some such meaning of a metaphysical statement. But unfortunately empiricists are not recognizing the lead of Kant in this direction.

Kant frankly stated that metaphysical entities have some practical interests and religious needs of man to fulfil. Metaphysical statements, therefore, have moral and religious meanings. But what are they? This problem is being discussed very much in recent years and the present author has expressed his views in three articles.<sup>1</sup> But probably the view is not much different from that of Kant.

Kant hoped to achieve a truce between science and religion by demarcating their respective regions. Science is a region of knowledge and religion is a realm of faith. Naturally the two have sovereign rights within their jurisdiction. But in the ultimate analysis, knowledge has a subordinate place in relation to the primacy of practical reason. This conclusion can be established in the following way.

Kant distinguished between phenomena and noumena. Human beings can know but their knowledge is confined to the phenomena alone. However, insofar as men are moral, they cease to be phenomenal. Now an act proceeding from a phenomenal self is causally determined. But insofar as we are moral, we act as if we are free, that is, we act as if we are not phenomenal, but are noumenal. Again, a noumenal self is a self in itself, an end in itself, for which the phenomena are. Hence, a moral act proceeds from a higher realm than scientific knowledge which is confined to the phenomenal world.

Besides, we have to act out of the pure regard for the national or noumenal law, if we want to attain to morality. In doing so we belong to the kingdom of ends, the realm of noumena. Hence, in morality we do not *know* God or the immortality of soul. But we *become* the higher self. Indeed we require persistent efforts of a number of endless lives to achieve a state in which our wills will become as holy as of God. Hence, the practical interest of man lies in making himself a thing of moral worth and value.

Is this demand of morality alien to the speculative interest of man? No, these metaphysical entities, the transcendental ideas of the supersensible are not alien to scientific interest, since they regulate knowledge and point out the farthest limits to which knowledge may extend. Further, the so-called transcendental illusions arise from the very nature of the cognitive structure in man. He has an active and spontaneous faculty of understanding, which however, he can use legitimately only with reference to the limited scope which sensibility prescribes. Consequently man *thinks* about a great many more things than can be grasped securely in scientific knowledge. Surely, therefore, metaphysical problems arise

from cognitive achievements to which they are geared. Grant scientific knowledge, and, one will have to grant the possibility of metaphysics as a realm of possible knowledge, a realm of faith. Hence, metaphysical and ethical life appears to be welded on intellectual life and follows from it as a promise and fulfilment of a larger life of values.

Therefore, we can conclude that, according to Kant, metaphysics is driven by an inner need of man which consists in so manipulating his thinking that in the end a life of moral value and religious piety results. In the final analysis, the inner spirit of Kant's transcendental idealism lies in holding that scientific knowledge is subservient to a life in which metaphysical values are realised. 'So think and so know all things that in the long run you may become a thing of moral excellence. Finally, you so temper your spirit by constant commitment and dedication to moral values that ultimately you may become as holy as God is.' This appears to the author as the metaphysical exhortation of Kant.

We can win for ourselves a permanent lesson from Kant's philosophical meditations with regard to the possibility of metaphysics. Metaphysics is sustained by a 'natural disposition' in man, because there is something in him which tells him to fulfil his ultimate destiny. This consists in becoming a whole or a self which gives him meaning to his intellectual restlessness and practical struggles of life. A thoughtless man in due course would also ripen, decay and die, but he would do so without becoming a citizen of the kingdom of ends. His journey in the next life would start *de novo* for becoming a thing of value. However, a thoughtful man, knowing fully well that on earth virtue is not rewarded would continue still to hear the voice of the categorical imperative of his good will, for he knows that there is nothing higher than this, either in this life or in the next. Is there any fundamental distinction then between Kant and Spinoza? Is not the life of intellectual love of God the same submission to a life of categorical imperative? Spinoza tells us to love without the prospect of being recompensed and Kant teaches a life of virtue independently of any prospect of happiness. The still small voice of the spiritual in man keeps on dinging in his ears. Those who have ears let them hear. Leonardo Da Vinci, according to Freud, heard it and so did Freud himself, say Hopkins and Jones. Philosophy uses its descriptive statements in the interest of prescriptive and exhortative statements and they are all welded together for inducing man to follow his vocation of becoming a thing of value, a thing of beauty. And a thing of beauty is a joy forever and it would never pass into nothingness. In this, all the teachings of philosophy are fulfilled.

1. 'The psychology of the metaphysicians' *Darshana*, January 1962: 'The reality of God', *Souvenir Volume presented to Dr. S. Radhakrishnan on his 75th birthday 'An empirical study of theological statements'*, *Contemporary Indian Thought*, Edited by Prof. K.S. Murty, 1961.