

## FOUR TYPES OF *A PRIORI*

### ( A Historico-Critical Study )

The rationalist philosophers agree on the point that reason provides us with the a priori elements and principles of knowledge. Almost all the pre-Kantian rationalists besides Aristotle in the Greek Age believed in some sort of intellectual intuition in which we apprehend a priori truths about things and even some a priori or eternal entities. Science, for them, was deducible from such truths and entities. Kant and post-Kantian rationalists (except Hegel and the Hegelians), again, hold that a priori truths and principles are not intuited. These are held either as constitutive of our objective experience or as regulative or methodological principles which enable us to organize our factual knowledge. Accordingly, the term "a priori" is taken here in a general sense to mean *eternal*, or *universal*, or *necessary*, or *independent of experience*, and the expression "a priori elements" to signify all those elements and principles in knowledge which are eternal, or universal, or necessary and/or which are the preconditions of knowledge or simply those which are the presuppositions of knowledge in some sense or other.

Stuart Hampshire says,

... the seventeenth century can properly be called, in the history of philosophy, the Age of Reason, because almost all the great philosophers of the period were trying to introduce the rigor of mathematical demonstration into all departments of knowledge, including philosophy itself. The form of philosophical argument in Descartes, Spinoza and Leibniz is largely deductive and a priori;...<sup>1</sup>

Descartes, the pioneer of the school, for example, has tried to draw all his philosophical conclusions from the self-evident ideas seen in *the natural light* of reason. He was convinced that one can solve all sorts of problems either of the natural sciences or of mathematics or of philosophy by this natural light of reason. The criterion of truth, for him, is *clarity and distinctness*. To throw more light on this criterion, we may quote Descartes :

I term that clear which is present and apparent to an attentive mind, . . . . But the distinct is that which is so precise and different from all other objects that it contains within itself nothing but what is clear.<sup>2</sup>

Descartes' position will be clearer from the following quotation from W. Windeband's *A History of Philosophy* :

'clear' is defined by Descartes as that which is intuitively present and manifest to the mind, *distinct* as that which is entirely clear in itself and precisely determined.<sup>3</sup>

It is evident from the above quotations that Descartes does not take "clarity and distinctness" in the psychological sense. For, a distinct object or a distinct proposition is not revealed even to a mind which is only attentive; it requires the natural light of reason to come to light. Thus the innate ideas which are distinct may be said to be a priori in the sense that these are self-evident truths and are grasped by reason.

Spinoza, who follows Descartes closely, distinguishes between three kinds of knowledge : *imaginatio*, *ratio* and *scientia intuitiva*. He holds that knowledge of the second and third kinds is necessarily true. In his own words :

Knowledge of the first kind alone is the cause of falsity, knowledge of the second and third orders is necessarily true.<sup>4</sup>

And his idea about the nature of reason will be clear from his own words :

It is not of the nature of reason to consider things as contingent, but as necessary.<sup>5</sup>

The meaning of the word "necessary" will be clear from the corollary 2 of the same proposition : "It is of the nature of reason to perceive things under a certain form of eternity". What is meant thereby is eternal existence. Descartes' innate ideas also refer to some non-sensuous entities in the sense that innate capacities, viz., the concepts of *thing*, *truth* and *consciousness* possess potential existence. Veitch's notes on "innate ideas" will make Descartes' position clear. He writes :

By *innate idea*, Descartes meant merely a mental modification which, existing in the mind antecedently to all experience, possesses, however, only a *potential* existence, until, on occasion of experience, it is called forth into *actual* consciousness.<sup>6</sup>

Obviously, these point to some *ontological apriorities*. It may be mentioned here that Descartes' innate ideas as ontological apriorities are examples of mental existents, but he does not confine to that. The existence of 'I' and that of 'God' are held by him as basic ontological apriorities. Ontological apriorities are 'beings' on which the existence of empirical things depend. (We are not going to maintain any distinction between 'being' and 'existence' here). That Spinoza speaks about the ontological apriorities becomes clearer when he says that we should deduce all our ideas from fixed and eternal things which "although they are individual, yet on account of their presence everywhere and their widespread power, will be to us like generalities or kinds of definitions of individual mutable things, and the proximate causes of all things".<sup>7</sup> He says further that we should "never pass over to generalities and abstractions, either in order to conclude anything real from them or to deduce them from anything real; for either of these interrupts the true progress of the intellect."<sup>8</sup>

But in Leibniz we find a clear distinction between the logical and the existential, in Leibniz's language, between the necessary and the contingent. Necessary statements are established as valid by reference to the principle of contradiction alone<sup>9</sup> while the validity of contingent statements cannot be so established. According to Leibniz necessary statements express "truths of reason" and contingent statements express "truths of fact". Truths of fact are expressed in statements which contain the notion of existence as their predicate. And the property of existence does not inhere in any substance except God whose essence includes existence. So only one existential proposition stating the existence of God is necessary; all other existential propositions are contingent. To quote Leibniz :

That God exists, that all right angles are equal to each other, are necessary truths; but it is a contingent truth that I exist, or that there are bodies which show an actual right angle.<sup>10</sup> The validity of the contingent truths is determined by the principle of sufficient reason which justifies the best possible choice of the Creator. Leibniz says,

The great foundation of mathematics is the principle of contradiction... And this principle alone suffices for proving all Arithmetic and all Geometry, i.e., all mathematical principles. But in order to proceed from mathematics to natural philosophy another principle is requisite... I mean the principle of sufficient reason.<sup>10</sup>

Leibniz holds that predication consists simply in stating the properties which inhere in a substance. In other words, all the predicates, except existence, according to him, are contained in their respective subjects. Accordingly, the truth of all non-existential (i.e., non-factual) statements can be established by the law of contradiction alone. For, it is simply by an analysis of the subject and predicate concepts that we can determine their truth. We require only to see that the predicate concept is not incompatible with the subject concept. The following extract from *The Philosophical Works of Leibniz* (Trans., G. M. Duncan) will make Leibniz's position clear :

Truths of reasoning are necessary and their opposite is impossible; truths of fact are contingent and their opposite is possible. When a truth is necessary, its reason can be found by analysis, resolving it into simpler ideas and truths, until we come to those that are primary.... Primary principles... cannot be proved, and indeed have no need of proof; and these are identical enunciations, whose opposite involves an express contradiction.<sup>11</sup>

For Leibniz, necessary elements are logical elements; these are not *entities*, i.e., ontological elements. So he is concerned with the *logical apriorities* when he speaks of innate ideas. Innate ideas, according to him, do not state the *existence* of any entity. These are general truths about the possible entities. His idea of the universe as consisting of substances called monads is an outcome of his logical doctrine of ultimate subjects. Monads come into existence by an act of God's creation. That Leibniz is concerned with the logical apriorities becomes further clear from the fact that the problem as to whether we have innate ideas is treated by him as a logical issue while that is treated by Locke as an empirical issue. Locke tries to settle the problem by introspection and research while Leibniz tries to see whether all concepts can satisfactorily be reduced to or analyzed into

concepts which are given in experience. Leibniz holds that there are necessary truths found in pure mathematics "that proof of which does not depend on examples, nor consequently on the testimony of the senses, although without the senses it would never have occurred to us to think of them."<sup>12</sup> He further admits that "Logic also, together with metaphysics and ethics...are full of such truths; and consequently their proof can only come from internal principles, which are called innate."<sup>12</sup>

Leibniz admits of two kinds of primitive truths: primitive truths of reason and those of fact. They are primitive because they are intuitively known—"all primitive truths, of reason or of fact, have this in common, that they cannot be proved by anything more certain."<sup>13</sup> It should be mentioned here that the primitive truths of fact are *not necessary* though they are the most *certain* of all truths of fact. Leibniz says, "Primitive truths of fact... are the immediate internal experiences of an immediateness of feeling."<sup>13</sup> He says that it is only as a primitive truth of fact that "the first truth of the Cartesians, or of St. Augustine, *I think therefore I am*, that is, *I am a thing that thinks*, holds good."<sup>13</sup> It is Leibniz's belief that the world, created by the benevolent God, must exhibit a few universal principles of order. These are a priori or innate truths. The law of sufficient reason, the principles of identity of indiscernibles, the principle of pre-established harmony are the examples of such truths. These truths guide us in framing hypotheses to explain phenomena. These help us to predict some truths about some possible events.

So far we have found two kinds of a priori truths, viz., *the ontological* and *the logical*. In Kant we find a third kind of a priori truth. We may call it *the epistemological a priori*, because, according to Kant, the a priori elements of this kind are the preconditions of developed experience in which we know objects. Kant holds that the sense-manifold is the only given and that objective knowledge consists in the synthesis of the given where we supplement sensation by processes of memory, imagination and understanding. By regressive analysis of our knowledge of objects, Kant discovers some rules or concepts in accordance with which every synthesis proceeds. These are, according to Kant, "concepts of an object in general" in the sense that they are of universal application being predicable of whatever else is to be considered

a part of the objective world. These rules or concepts are a priori anticipations of some order in the objective world. These ideas are called a priori first because, they are held without regard to the nature of the given and applied to whatever is given and, secondly, because they cannot conceivably be derived from immediate experience. Kant calls these ideas categories which represent the contribution of the pure understanding to knowledge.

It is important to note here that Kant's categories are not to be conceived as independently existing things or relations. They are not like Forms or Ideas of Plato. Nor do they denote things or relations as Aristotole's categories do. Kant's categories, are, rather, concepts of the ultimate ways in which we give unity to sense-experience. They are concepts of the processes of synthesis. They are not entities. Unless they are applied to the given, they are empty forms. And as processes of synthesis they are unintelligible until something is presented for synthesis. The categories of substance and causality, for example, were treated as concepts of things and relations respectively by the pre-Kantian rationalists. For them, they were objects of intellectual intuition. But, for Kant these categories operate in the understanding and interpretation of the given. Substance, for him, is the idea of permanence. This idea of permanence plays its part in the understanding of change, the all-important characteristic of time. Again, without the idea of causality we cannot distinguish between subjective and objective succession. So we see that Kant's categories are necessary pre-conditions or pre-suppositions of our knowledge of object, and in this sense they are epistemological apriorities.

C. I. Lewis propounds apriorities of a different sort in his book *Mind and the World Order*—apriorities which resemble the Kantian type of apriorities in two respects : (i) mental in origin and, as he thinks, (ii) categorial in nature. As regards the source of apriorities Lewis himself writes,

Whatever belongs to the mind itself is assured in advance. This is the one point upon which all conceptions which recognize an a priori have agreed.<sup>14</sup>

That "mind" is taken here in the sense of "understanding" is clear from the fact that he has recognised interpretation to be the most significant function of the mind. He says, "There is

no knowledge without interpretation".<sup>15</sup> and that interpretation 'represents an activity of the mind.' He says, "The a priori has its origin in an act of mind. . . ." <sup>16</sup> and that it is a peculiar possession of the mind because it bears the stamp of mind's creation. According to him,

This point of the relation of the a priori to the mind, is really of prime importance, for upon it depends that assurance, superior to the assurance we can have of generalizations from experience, that nothing future experience can reveal will falsify it.<sup>17</sup>

This last assertion suggests the nature of the a priori. It is of the categorial type :

That is a priori which we can maintain in the face of all experience *no matter what*.<sup>18</sup>

Again he says,

That only can be a priori which is true *no matter what*.<sup>19</sup>

Lewis says that the a priori represents an attitude of the mind in some sense freely taken, that is, without anticipating the given.

In his own words :

What is anticipated is not the given but our attitude toward it; it formulates an uncompelled initiative of mind, our categorial ways of acting.<sup>20</sup>

'Uncompelled', in the sense that it is not dependent on experience in any way. "And the a priori is independent of experience. . . . precisely because it prescribes *nothing* to the content of experience".<sup>21</sup> What does the a priori do then? Where lies its significance? Lewis replies,

Truth which is a priori anticipates the character of the *real*; otherwise, it would possess no significance whatever.<sup>22</sup>

But what is real if not the given as such? Lewis says that the real is the given categorially interpreted. The necessity of the a priori, Lewis contends, lies in its character as legislative act. He writes,

In determining its own interpretations—and only so—the mind legislates for reality, no matter what future experience may bring.<sup>23</sup>

Does the mind's legislative act preclude any imaginable or unimaginable content of experience in the future? Lewis answers in the negative and says,

A categorial principle is a sort of *purposive attitude* taken in the interests of understanding and intelligibility with which we confront the given.<sup>24</sup>

He says that such principles, which are the expressions of mind's fundamental attitudes towards the given, preclude only our interpreting the future experience in a fashion contrary to our pre-determined attitude or bent. And to the question how we can be assured positively that our minds will not alter in these fundamental attitudes, he replies that we cannot have any such final assurance. He says that the present theory "is compatible with the supposition that *categorial* modes of interpretation may be *subject to gradual transition and even to fairly abrupt alteration*".<sup>25</sup> He simply demands that any alteration or transition will have some rationale :

To be sure, the continuity of fundamental attitudes and purposes is the core of personality; the supposition that, without any rationale, these may become altered, is simply the supposition that a new and abnormal personality may replace our present one. This is admittedly possible, but it is not a contingency against which the theory of knowledge is supposed to provide.<sup>26</sup>

As regards this last point Lewis's theory differs from that of Kant. Kant's theory is so rigid that it permits no transition and no alteration. Lewis's theory differs from Kant's in another important respect. It denies that the a priori validity of our categorial interpretation requires also a priori modes of our receptivity or intuition. But it appears that this theory, although it is different in important respects from that of Kant, is nearer to it more than any other theory of the a priori in being epistemological. Indeed, Lewis himself, it seems, does not draw any distinction between the logical and the epistemological a priori.

A fourth class of apriorities is emphasised by some of the twentieth century philosophers. These, as they call them, are methodological postulates. According to them, "a priori prin-



principles are methodologic or regulative principles which enable us to organize our factual knowledge".<sup>27</sup> Not only that, they are also 'expressive of the fundamental nature of things'.<sup>28</sup> Thus, Cohen shows with examples, that "the rules of logic and pure mathematics may be viewed not only as principles of inference applicable to all systems but also as descriptive of certain abstract invariant relations which constitute an objective order characteristic of any subject-matter".<sup>29</sup>

Modern logico-critical philosophers hold that there are no absolute a priori concepts or principles in the sense that they are necessary pre-suppositions of our knowledge of object in general. According to them, a priori concepts and principles are 'either formal or relative to systems of possible knowledge'.<sup>29</sup> Formal logic and pure mathematics provide us with formal apriorities while logic of sciences and applied mathematics supply us apriorities which are relative to respective systems. They deny absolute apriorities "because an absolute totality of all existence is not a determinate object of discourse".<sup>29</sup> We propose an examination of this position in our section on the nature of the a priori, shortly to follow.

Meanwhile we may discuss a very important point, viz., whether a priori propositions of this sort are mere conventions or not. Thinkers like Poincare hold that they are mere conventions. According to Poincare, a priori positions are really firm resolutions to carry on the scientific game according to certain rules or stipulations. But Cohen disagrees with Poincare. He holds that axioms which guide scientific investigations are genuine assertions about objective existence. Cohen says that among the several assumptions we choose 'those that are productive of consequences consistent with observable fact' and that this preference cannot be on the sole ground of simplicity. He says,

The simplicity which science seeks is not something divorced from the facts explained. Scientific simplicity is the characteristic of hypotheses which seize upon factors manifesting themselves in widely diverse phenomena.<sup>30</sup>

Then he concludes by saying,

...if the assumption that physical nature is a causal system leads us to find connections between things, it is because the connections are there to be found and not merely because we are resolved to find them.<sup>30</sup>

As an actual example he cites the case of the Bureau of Standards at Washington and says that we pick out a certain platinum bar located there and say that so long as it is at the same temperature and pressure it has the same length, not without some objective ground, but on the ground that it enables us to anticipate actual uniformities in nature.

### **The nature and the classification of the a priori**

We have distinguished between *four classes of apriorities*. We have said that the ontological apriorities are entitative pre-conditions of some existents and of their knowledge; the epistemological apriorities are pre-conditions of our knowledge of objects; the methodological apriorities are postulates, which the scientists have to pre-suppose in order to systematize the materials of their respective fields; and the logical apriorities are means to spell out *purely* formal relations with empty concepts. But it may be argued that the classifications drawn here of the apriorities are arbitrary. They are so, one may contend, first because the term "ontological a priori" has got no meaning and, secondly, because the logical, the epistemological and the methodologic apriorities are not different as there is no difference between logic, epistemology and methodology. In answer, however, to all these we say that the term "a priori" is used in two broad senses: first, whatever is prior to and independent of sense-experience is a priori, and secondly, whatever is necessary is a priori. Now, generally logical priority and psychological priority are taken to be the only two possible types of priority; but this is not actually the case. Even the disjunction 'either logical or psychological' is based on a supposed ontology of time; psychological priority is temporal while logical priority is non-temporal. But in philosophical discourse we find much importance is given to purely ontological priority also. What is ontologically prior may be called entitative precondition of our empirical knowledge. Plato's Ideas, Descartes' God and self, Spinoza's Substance and Leibniz's

monads are beings of a higher level on which the being (or existence) of empirical entities depend. These entitative pre-conditions may be called *ontological apriorities*, and, we think, it is hard to deny that there is, in philosophical literature, serious study of apriorities of this sort. The question as to whether such apriorities can be maintained consistently in a realistic theory should not be allowed to obscure this historical fact.

University of North Bengal,  
Darjeeling

Sukrit Chandra Naug

#### NOTES

1. S. Hampshire, ed., *The Age of Reason*, U. S. A., 1958, p. 17 (Introduction)
2. Haldane and Ross, Trans. and ed., *The Philosophical Works of Descartes*, U. S. A., 1931. Vol. I. p. 237.
3. W. Windelband, *op. cit.*, p. 392.
4. Spinoza, *op. cit.*, Part II. Prop. XLI
5. Spinoza, *op. cit.*, Part II. Prop. XLIV
6. Descartes, *A Discourse on Method*, London, 1957, p. 250 (Notes)
7. S. Hampshire, *op. cit.*, p. 141; quoted from the extracts of Spinoza's *The Treatise on the Correction of the Understanding*.
8. S. Hampshire, *op. cit.*, p. 140; quoted from the extracts of Spinoza's *The Treatise on the Correction of the Understanding*.
9. And about the principle of contradiction Leibniz writes, "The first of the truths of reason is the principle of contradiction, or, what comes to the same thing, that of identity" (B. Russell *op. cit.*, p. 207)
10. Russell, *op. cit.*, p. 208
11. Russell, *op. cit.*, pp. 207-208
12. S. Hampshire, *op. cit.*, p. 173; extracts from Leibniz's *New Essays Concerning Human Understanding*
13. S. Hampshire, *op. cit.*, p. 176; extracts from Leibniz's *New Essays Concerning Human Understanding*
14. C. I. Lewis, *Mind and the World Order*. (Dover edition) U. S. A. 1956, pp. 212-213.
15. *Ibid.*, p. 195

16. *Ibid.*, p. 213
17. *Ibid.*, p. 212
18. *Ibid.*, p. 224
19. *Ibid.*, p. 197
20. *Ibid.*
21. *Ibid.*
22. <sup>20</sup>*Ibid.*
23. *Ibid.*
24. *Ibid.* p. 228; italics ours.
25. *Ibid.* italics ours.
26. *Ibid.*, pp. 228-229
27. Cohen, *op. cit.*, p. 142
28. Cohen, *op. cit.*, p. 143
29. Cohen, *op. cit.*, p. 145
30. Cohen, *op. cit.*, p. 142