

II

THE PHILOSOPHIC TEST OF THE REVELATIONS OF RELIGIOUS EXPERIENCE

SCHOLASTIC philosophy has put forward three arguments for the existence of God. These arguments, known as the Cosmological, the Teleological, and the Ontological, embody a real movement of thought in its quest after the Absolute. But regarded as logical proofs, I am afraid; they are open to serious criticism and further betray a rather superficial interpretation of experience.

The cosmological argument views the world as a finite effect, and passing through a series of dependent sequences, related as causes and effects, stops at an uncaused first cause, because of the unthinkability of an infinite regress. It is, however, obvious that a finite effect can give only a finite cause, or at most an infinite series of such causes. To finish the series at a certain point, and to elevate one member of the series to the dignity of an uncaused first cause, is to set at naught the very law of causation on which the whole argument proceeds. Further, the first cause reached by the argument necessarily excludes its effect. And this means that the effect, constituting a limit to its own cause, reduces it to something finite. Again, the cause reached by the argument cannot be regarded as a necessary being for the obvious reason that in the relation of cause and effect the two terms of the relation are equally necessary to each other. Nor is the necessity of existence identical with the conceptual necessity of causation which is the utmost that this argument can prove. The argument really tries to reach the infinite by merely negating the finite. But the infinite reached by contradicting the finite is a false infinite, which neither explains itself nor the finite which is thus made to stand in opposition to the infinite. The true infinite does not exclude the finite; it embraces the finite without effacing its finitude, and explains and justifies its being. Logically speaking, then, the movement from the finite to the infinite as embodied in the cosmological argument is quite

illegitimate; and the argument fails *in toto*. The teleological argument is no better. It scrutinizes the effect with a view to discover the character of its cause. From the traces of foresight, purpose, and adaptation in nature, it infers the existence of a self-conscious being of infinite intelligence and power. At best, it gives, us a skilful external contriver working on a pre-existing dead and intractable material the elements of which are, by their own nature, incapable of orderly structures and combinations. The argument gives us a contriver only and not a creator; and even if we suppose him to be also the creator of his material, it does no credit to his wisdom to create his own difficulties by first creating intractable material, and then overcoming its resistance by the application of methods alien to its original nature. The designer regarded as external to his material must always remain limited by his material, and hence a finite designer whose limited resources compel him to overcome his difficulties after the fashion of a human mechanician. The truth is that the analogy on which the argument proceeds is of no value at all. There is really no analogy between the work of the human artificer and the phenomena of Nature. The human artificer cannot work out his plan except by selecting and isolating his materials from their natural relations and situations. Nature, however, constitutes a system of wholly interdependent members; her processes present no analogy to the architect's work which, depending on a progressive isolation and integration of its material, can offer no resemblance to the evolution of organic wholes in Nature. The ontological argument which has been presented in various forms by various thinkers has always appealed most to the speculative mind. The Cartesian form of the argument runs thus:¹

To say that an attribute is contained in the nature or in the concept of a thing is the same as to say that the attribute is true of this thing and that it may be affirmed to be in it. But necessary existence is contained in the nature or the concept of God. Hence it may be with truth affirmed that necessary existence is in God, or that God exists.

Descartes supplements this argument by another. We have the idea of a perfect being in our mind. What is the source of the idea? It cannot come from Nature, for Nature exhibits nothing but change. It cannot create the idea of a perfect being. Therefore, corresponding to the idea in our mind, there must be

an objective counterpart which is the cause of the idea of a perfect being in our mind. This argument is somewhat of the nature of the cosmological argument which I have already criticized. But whatever may be the form of the argument, it is clear that the conception of existence is no proof of objective existence. As in Kant's criticism of this argument the notion of three hundred dollars in my mind cannot prove that I have them in my pocket.² All that the argument proves is that the idea of a perfect being includes the *idea* of his existence. Between the idea of a perfect being in my mind and the objective reality of that being there is a gulf which cannot be bridged over by a transcendental act of thought. The argument, as stated, is in fact *a petitio principii*:³ for it takes for granted the very point in question, i.e. the transition from the logical to the real. I hope I have made it clear to you that the ontological and the teleological arguments, as ordinarily stated, carry us nowhere. And the reason of their failure is that they look upon "thought" as an agency working on things from without. This view of thought gives us a mere mechanician in the one case, and creates an unbridgeable gulf between the ideal and the real in the other. It is, however, possible to take thought not as a principle which organizes and integrates its material from the outside, but as a potency which is formative of the very being of its material. Thus regarded thought or idea is not alien to the original nature of things; it is their ultimate ground and constitutes the very essence of their being, infusing itself in them from the very beginning of their career and inspiring their onward march to a self-determined end. But our present situation necessitates the dualism of thought and being. Every act of human knowledge bifurcates what might on proper inquiry turn out to be a unity into a self that knows and a confronting "other" that is known. That is why we are forced to regard the object that confronts the self as something existing in its own right, external to and independent of the self whose act of knowledge makes no difference to the object known. The true significance of the ontological and the teleological arguments will appear only if we are able to show that the human situation is not final and that thought and being are ultimately one. This is possible only if we carefully examine and interpret experience, following the clue furnished by the Qur'an which regards experience within and without as symbolic of a reality described by it,⁴ as "*the First*

and the Last, the Visible and the Invisible."⁵ This I propose to do in the present lecture.

Now experience, as unfolding itself in time, presents three main levels— the level of matter, the level of life, and the level of mind and consciousness— the subject-matter of physics, biology, and psychology, respectively. Let us first turn our attention to matter. In order exactly to appreciate the position of modern physics it is necessary to understand clearly what we mean by matter. Physics, as an empirical science, deals with the facts of experience, i.e. sense-experience. The physicist begins and ends with sensible phenomena, without which it is impossible for him to verify his theories. He may postulate imperceptible entities, such as atoms; but he does so because he cannot otherwise explain his sense-experience. Thus physics studies the material world, that is to say, the world revealed by the senses. The mental processes involved in this study, and similarly religious and aesthetic experience, though part of the total range of experience, are excluded from the scope of physics for the obvious reason that physics is restricted to the study of the material world, by which we mean the world of things we perceive. But when I ask you what are the things you perceive in the material world, you will, of course, mention the familiar things around you, e.g. earth, sky, mountains, chairs, tables, etc. When I further ask you what exactly you perceive of these things, you will answer— their qualities. It is clear that in answering such a question we are really putting an interpretation on the evidence of our senses. The interpretation consists in making a distinction between the thing and its qualities. This really amounts to a theory of matter, i.e. of the nature of sense-data, their relation to the perceiving mind and their ultimate causes. The substance of this theory is as follows:⁶

The sense objects (colours, sounds, etc.) are states of the perceiver's mind, and as such excluded from nature regarded as something objective. For this reason they cannot be in any proper sense qualities of physical things. When I say, "The sky is blue", it can only mean that the sky produces a blue sensation in my mind, and not that the colour blue is a quality found in the sky. As mental states they are impressions, that is to say, they are effects produced in us. The cause of these effects is matter, or material things acting through our sense organs, nerves, and brain on our mind. This physical cause acts by contact or

impact; hence it must possess the qualities of shape, size, solidity and resistance.

It was the philosopher Berkeley who first undertook to refute the theory of matter as the unknown cause of our sensations.⁷ In our own times Professor Whitehead— an eminent mathematician and scientist— has conclusively shown that the traditional theory of materialism is wholly untenable. It is obvious that, on the theory, colours, sounds, etc., are subjective states only, and form no part of Nature. What enters the eye and the ear is not colour or sound, but invisible ether waves and inaudible air waves. Nature is not what we know her to be; our perceptions are illusions and cannot be regarded as genuine disclosures of Nature, which, according to the theory, is bifurcated into mental impressions, on the one hand, and the unverifiable, imperceptible entities producing these impressions, on the other. If physics constitutes a really coherent and genuine knowledge of perceptively known objects, the traditional theory of matter must be rejected for the obvious reason that it reduces the evidence of our senses, on which alone the physicist, as observer and experimenter, must rely, to the mere impressions of the observer's mind. Between Nature and the observer of Nature, the theory creates a gulf which he is compelled to bridge over by resorting to the doubtful hypothesis of an imperceptible something, occupying an absolute space like a thing in a receptacle and causing our sensation by some kind of impact. In the words of Professor Whitehead, the theory reduces one-half of Nature to a "dream" and the other half to a "conjecture".⁸ Thus physics, finding it necessary to criticize its own foundations, has eventually found reason to break its own idol, and the empirical attitude which appeared to necessitate scientific materialism has finally ended in a revolt against matter. Since objects, then, are not subjective states caused by something imperceptible called matter, they are genuine phenomena which constitute the very substance of Nature and which we know as they are in Nature. But the concept of matter has received the greatest blow from the hand of Einstein— another eminent physicist, whose discoveries have laid the foundation of a far-reaching revolution in the entire domain of human thought. Mr. Russell says:⁹

The theory of Relativity by merging time into space-time has damaged the traditional notion of substance more than all the

arguments of the philosophers. Matter, for common sense, is something which persists in time and moves in space. But for modern relativity-physics this view is no longer tenable. A piece of matter has become not a persistent thing with varying states, but a system of inter-related events. The old solidity is gone, and with it the characteristics that to the materialist made matter seem more real than fleeting thoughts.

According to Professor Whitehead, therefore, Nature is not a static fact situated in an a-dynamic void, but a structure of events possessing the character of a continuous creative flow which thought cuts up into isolated immobilities out of whose mutual relations arise the concepts of space and time. Thus we see how modern science utters its agreement with Berkeley's criticism which it once regarded as an attack on its very foundation. The scientific view of Nature as pure materiality is associated with the Newtonian view of space as an absolute void in which things are situated. This attitude of science has, no doubt, ensured its speedy progress; but the bifurcation of a total experience into two opposite domains of mind and matter has today forced it, in view of its own domestic difficulties, to consider the problems which, in the beginning of its career, it completely ignored. The criticism of the foundations of the mathematical sciences has fully disclosed that the hypothesis of a pure materiality, an enduring stuff situated in an absolute space, is unworkable. Is space an independent void in which things are situated and which would remain intact if all things were withdrawn? The ancient Greek philosopher Zeno approached the problem of space through the question of movement in space. His arguments for the unreality of movement are well known to the students of philosophy, and ever since his days the problem has persisted in the history of thought and received the keenest attention from successive generations of thinkers. Two of these arguments may be noted here.¹⁰ Zeno, who took space to be infinitely divisible, argued that movement in space is impossible. Before the moving body can reach the point of its destination it must pass through half the space intervening between the point of start and the point of destination; and before it can pass through that half it must travel through the half of the half; and so on to infinity. We cannot move from one point of space to another without passing through an infinite number of points in the intervening space. But it is impossible to pass through an

infinity of points in a finite time. He further argued that the flying arrow does not move, because at any time during the course of its flight it is at rest in some point of space. Thus Zeno held that movement is only a deceptive appearance and that Reality is one and immutable. The unreality of movement means the unreality of an independent space. Muslim thinkers of the school of al-Ash'arī did not believe in the infinite divisibility of space and time. With them space, time, and motion are made up of points and instants which cannot be further subdivided. Thus they proved the possibility of movement on the assumption that infinitesimals do exist; for if there is a limit to the divisibility of space and time, movement from one point of space to another point is possible in a finite time.¹¹ Ibn Hazm, however, rejected the Ash'arite notion of infinitesimals,¹² and modern mathematics has confirmed his view. The Ash'arite argument, therefore, cannot logically resolve the paradox of Zeno. Of modern thinkers the French philosopher Bergson and the British mathematician Bertrand Russell have tried to refute Zeno's arguments from their respective standpoints. To Bergson movement, as true change, is the fundamental Reality. The paradox of Zeno is due to a wrong apprehension of space and time which are regarded by Bergson only as intellectual views of movement. It is not possible to develop here the argument of Bergson without a fuller treatment of the metaphysical concept of life on which the whole argument is based.¹³ Bertrand Russell's argument proceeds on Cantor's theory of mathematical continuity¹⁴ which he looks upon as one of the most important discoveries of modern mathematics.¹⁵ Zeno's argument is obviously based on the assumption that space and time consist of infinite number of points and instants. On this assumption it is easy to argue that since between two points the moving body will be out of place, motion is impossible, for there is no place for it to take place. Cantor's discovery shows that space and time are continuous. Between any two points in space there is an infinite number of points, and in an infinite series no two points are next to each other. The infinite divisibility of space and time means the compactness of the points in the series; it does not mean that points are mutually isolated in the sense of having a gap between one another. Russell's answer to Zeno, then, is as follows:¹⁶

Zeno asks how can you go from one position at one moment to the

next position at the next moment without in the transition being at no position at no moment? The answer is that there is no next position to any position, no next moment to any moment because between any two there is always another. If there were, infinitesimals movement would be impossible, but there are none. Zeno therefore is right in saying that the arrow is at rest at every moment of its flight, wrong in inferring that therefore it does not move, for there is a one-one correspondence in a movement between the infinite series of positions and the infinite series of instants. According to this doctrine, then it is possible to affirm the reality of space, time, and movement, and yet avoid the paradox in Zeno's arguments.

Thus Bertrand Russell proves the reality of movement on the basis of Cantor's theory of continuity. The reality of movement means the independent reality of space and the objectivity of Nature. But the identity of continuity and the infinite divisibility of space is no solution of the difficulty. Assuming that there is a one-one correspondence between the infinite multiplicity of instants in a finite interval of time and an infinite multiplicity of points in a finite portion of space, the difficulty arising from the divisibility remains the same. The mathematical conception of continuity as infinite series applies not to movement regarded as an act, but rather to the picture of movement as viewed from the outside. The act of movement, i.e. movement as lived and not as thought, does not admit of any divisibility. The flight of the arrow observed as a passage in space is divisible, but its flight regarded as an act, apart from its realization in space, is one and incapable of partition into a multiplicity. In partition lies its destruction.

With Einstein space is real, but relative to the observer. He rejects the Newtonian concept of an absolute space. The object observed is variable; it is relative to the observer; its mass, shape, and size change as the observer's position and speed change. Movement and rest, too, are relative to the observer. There is, therefore, no such thing as a self-subsistent materiality of classical physics. It is, however, necessary here to guard against a misunderstanding. The use of the word "observer" in this connexion has misled Wildon Carr into the view that the Theory of Relativity inevitably leads to Monadistic Idealism. It is true that according to the theory the shapes, sizes, and durations of phenomena are not absolute. But as Professor Nunn points out,

the space-time frame does not depend on the observer's mind; it depends on the point of the material universe to which his *body* is attached. In fact, the "observer" can be easily replaced by a recording apparatus.¹⁷ Personally, I believe that the ultimate character of Reality is spiritual: but in order to avoid a widespread misunderstanding it is necessary to point out that Einstein's theory, which, as a scientific theory, deals only with the structure of things, throws no light on the ultimate nature of things which possess that structure. The philosophical value of the theory is twofold. First, it destroys, not the objectivity of Nature, but the view of substance as simple location in space— a view which led to materialism in Classical Physics. "Substance" for modern Relativity-Physics is not a persistent thing with variable states, but a system of interrelated events. In Whitehead's presentation of the theory the notion of "matter" is entirely replaced by the notion of "organism". Secondly, the theory makes space dependent on matter. The universe, according to Einstein, is not a kind of island in an infinite space; it is finite but boundless; beyond it there is no empty space. In the absence of matter the universe would shrink to a point. Looking, however, at the theory from the standpoint that I have taken in these lectures, Einstein's Relativity presents one great difficulty, i.e. the unreality of time. A theory which takes time to be a kind of fourth dimension of space must, it seems, regard the future as something already given, as indubitably fixed as the past.¹⁸ Time as a free creative movement has no meaning for the theory. It does not pass. Events do not happen; we simply meet them. It must not, however, be forgotten that the theory neglects certain characteristics of time as experienced by us; and it is not possible to say that the nature of time is exhausted by the characteristics which the theory does note in the interests of a systematic account of those aspects of Nature which can be mathematically treated. Nor is it possible for us laymen to understand what the real nature of Einstein's time is. It is obvious that Einstein's time is not Bergson's pure duration. Nor can we regard it as serial time. Serial time is the essence of causality as defined by Kant. The cause and its effect are mutually so related that the former is chronologically prior to the latter, so that if the former is not, the latter cannot be. If mathematical time is serial time, then on the basis of the theory it is possible, by a careful choice of the velocities of the observer

and the system in which a given set of events is happening, to make the effect precede its cause.¹⁹ It appears to me that time regarded as a fourth dimension of space really ceases to be time. A modern Russian writer, Ouspensky, in his book called *Tertium Organum*, conceives the fourth dimension to be the movement of a three-dimensional figure in a direction not contained in itself.²⁰ Just as the movement of the point, the line and the surface in a direction not contained in them gives us the ordinary three dimensions of space, in the same way the movement of the three-dimensional figure in a direction not contained in itself must give us the fourth dimension of space. And since time is the *distance* separating events in order of *succession* and binding them in different wholes, it is obviously a distance lying in a direction not contained in the three-dimensional space. As a new dimension this distance, separating events in the order of succession, is incommensurable with the dimensions of three-dimensional space, as a year is incommensurable with St. Petersburg. It is perpendicular to all directions of three-dimensional space, and is not parallel to any of them. Elsewhere in the same book Ouspensky describes our time-sense as a misty space-sense and argues, on the basis of our psychic constitution, that to one-, two-, or three-dimensional beings the higher dimension must always appear as succession in time. This obviously means that what appears to us three-dimensional beings as time is in reality an imperfectly sensed space-dimension which in its own nature does not differ from the perfectly sensed dimensions of Euclidean space. In other words, time is not a genuine creative movement; and that what we call future events are not fresh happenings, but things already given and located in an unknown space. Yet in his search for a fresh direction, other than the three Euclidean dimensions, Ouspensky needs a real serial time, i.e. a distance separating events in the order of succession. Thus time which was needed and consequently viewed as succession for the purposes of one stage of the argument is quietly divested, at a later stage, of its serial character and reduced to what does not differ in anything from the other lines and dimensions of space. It is because of the serial character of time that Ouspensky was able to regard it as a genuinely new direction in space. If this characteristic is in reality an illusion, how can it fulfil Ouspensky's requirements of an original dimension?

Passing now to other levels of experience- life and consciousness. Consciousness may be imagined as a deflection from life. Its function is to provide a luminous point in order to enlighten the forward rush of life.²¹ It is a case of tension, a state of self concentration, by means of which life manages to shut out all memories and associations which have no bearing on a present action. It has no well-defined fringes; it shrinks and expands as the occasion demands. To describe it as an epiphenomenon of the processes of matter is to deny it as an independent activity, and to deny it as an independent activity is to deny the validity of all knowledge which is only a systematized expression of consciousness. Thus consciousness is a variety of the purely spiritual principle of life which is not a substance, but an organizing principle, a specific mode of behaviour essentially different to the behaviour of an externally worked machine. Since, however, we cannot conceive of a purely spiritual energy, except in association with a definite combination of sensible elements through which it reveals itself, we are apt to take this combination as the ultimate ground of spiritual energy. The discoveries of Newton in the sphere of matter and those of Darwin in the sphere of Natural History reveal a mechanism. All problems, it was believed, were really the problems of physics. Energy and atoms, with the properties self-existing in them, could explain everything including life, thought, will, and feeling. The concept of mechanism- a purely physical concept- claimed to be the all-embracing explanation of Nature. And the battle for and against mechanism is still being fiercely fought in the domain of Biology. The question, then, is whether the passage to Reality through the revelations of sense-perception necessarily leads to a view of Reality essentially opposed to the view that religion takes of its ultimate character. Is Natural Science finally committed to materialism? There is no doubt that the theories of science constitute trustworthy knowledge, because they are verifiable and enable us to predict and control the events of Nature. But we must not forget that what is called science is not a single systematic view of Reality. It is a mass of sectional views of Reality- fragments of a total experience which do not seem to fit together. Natural Science deals with matter, with life, and with mind; but the moment you ask the question how matter, life, and mind are mutually related, you begin to see the sectional character of the various

sciences that deal with them and the inability of these sciences, taken singly, to furnish a complete answer to your question. In fact, the various natural sciences are like so many vultures falling on the dead body of Nature, and each running away with a piece of its flesh. Nature as the subject of science is a highly artificial affair, and this artificiality is the result of that selective process to which science must subject her in the interests of precision. The moment you put the subject of science in the total of human experience it begins to disclose a different character. Thus religion, which demands the whole of Reality and for this reason must occupy a central place in any synthesis of all the data of human experience, has no reason to be afraid of any sectional views of Reality. Natural Science is by nature sectional; it cannot, if it is true to its own nature and function, set up its theory as a complete view of Reality. The concepts we use in the organization of knowledge are, therefore, sectional in character, and their application is relative to the level of experience to which they are applied. The concept of "cause", for instance, the essential feature of which is priority to the effect, is relative to the subject-matter of physical science which studies one special kind of activity to the exclusion of other forms of activity observed by others. When we rise to the level of life and mind the concept of cause fails us, and we stand in need of concepts of a different order of thought. The action of living organisms, initiated and planned in view of an end, is totally different to causal action. The subject-matter of our inquiry, therefore, demands the concepts of "end" and "purpose", which act from within unlike the concept of cause which is external to the effect and acts from without. No doubt, there are aspects of the activity of a living organism which it shares with other objects of Nature. In the observation of these aspects the concepts of physics and chemistry would be needed; but the behaviour of the organism is essentially a matter of inheritance and incapable of sufficient explanation in terms of molecular physics. However, the concept of mechanism has been applied to life and we have to see how far the attempt has succeeded. Unfortunately, I am not a biologist and must turn to biologists themselves for support. After telling us that the main difference between a living organism and a machine is that the former is self-maintaining and self-reproducing, J. S. Haldane says:²²

It is thus evident that although we find within the living body many phenomena which, so long as we do not look closely, can be interpreted satisfactorily as physical and chemical mechanism, there are side by side other phenomena [i.e. self-maintenance and reproduction] for which the possibility of such interpretation seems to be absent. The mechanists assume that the bodily mechanisms are so constructed as to maintain, repair, and reproduce themselves. In the long process of natural selection, mechanisms of this sort have, they suggest, been evolved gradually.

Let us examine this hypothesis. When we state an event in mechanical terms we state it as a necessary result of certain simple properties of separate parts which interact in the event.... The essence of the explanation or re-statement of the event is that after due investigation we have assumed that the parts interacting in the event have certain simple and definite properties, so that they always react in the same way under the same conditions. For a mechanical explanation the reacting parts must first be given. Unless an arrangement of parts with definite properties is given, it is meaningless to speak of mechanical explanation.

To postulate the existence of a self-producing or self-maintaining mechanism is, thus, to postulate something to which no meaning can be attached. Meaningless terms are sometimes used by physiologists; but there is none so absolutely meaningless as the expression "mechanism of reproduction". Any mechanism there may be in the parent organism is absent in the process of reproduction, and must re-constitute itself at each generation, since the parent organism is reproduced from a mere tiny speck of its own body. There can be no mechanism of reproduction. The idea of a mechanism which is constantly maintaining or reproducing its own structure is self-contradictory. A mechanism which reproduced itself would be a mechanism without parts, and, therefore, not a mechanism.

Life is, then, a unique phenomenon and the concept of mechanism is inadequate for its analysis. Its "factual wholeness", to use an expression of Driesch—another notable biologist—is a kind of unity which, looked at from another point of view, is also a plurality. In all the purposive processes of growth and adaptation to its environment, whether this adaptation is secured by the formation of fresh or the modification of old habits, it possesses a career which is unthinkable in the case of a machine. And the possession of a career means that the sources of its activity cannot be explained except in reference to a remote past, the origin of which, therefore, must be sought in a spiritual

reality revealable in, but non-discoverable by, any analysis of spatial experience. It would, therefore, seem that life is foundational and anterior to the routine of physical and chemical processes which must be regarded as a kind of fixed behaviour formed during a long course of evolution. Further, the application of the mechanistic concepts to life, necessitating the view that the intellect itself is a product of evolution, brings science into conflict with its own objective principle of investigation. On this point I will quote a passage from Wildon Carr, who has given a very pointed expression to this conflict:²³

If intellect is a product of evolution the whole mechanistic concept of the nature and origin of life is absurd, and the principle which science has adopted must clearly be revised. We have only to state it to see the self-contradiction. How can the intellect, a mode of apprehending reality, be itself an evolution of something which only exists as an abstraction of that mode of apprehending, which is the intellect? If intellect is an evolution of life, then the concept of the life which can evolve intellect as a particular mode of apprehending reality must be the concept of a more concrete activity than that of any abstract mechanical movement which the intellect can present to itself by analyzing its apprehended content. And yet further, if the intellect be a product of the evolution of life, it is not absolute but relative to the activity of the life which has evolved it; how then, in such case, can science exclude the subjective aspect of the knowing and build on the objective presentation as an absolute? Clearly the biological sciences necessitate a reconsideration of the scientific principle.

I will now try to reach the primacy of life and thought by another route, and carry you a step farther in our examination of experience. This will throw some further light on the primacy of life and will also give us an insight into the nature of life as a psychic activity. We have seen, that Professor Whitehead describes the universe, not as something static, but as a structure of events possessing the character of a continuous creative flow. This quality of Nature's passage in time is perhaps the most significant aspect of experience which the Qur'an especially emphasizes and which, as I hope to be able to show in the sequel, offers the best clue to the ultimate nature of Reality. To some of the verses (3: 190-91; 2: 164; 24: 44)²⁴ bearing on the point I have already drawn your attention. In view of the great importance of the subject I will add here a few more:

Verily, in the alternations of night and of day and in all that God hath created in the Heavens and in the earth are signs to those who fear him (10: 6).

And it is He Who hath ordained the night and the day to succeed one another for those who desire to think on God or desire to be thankful (25:62).

Seest thou not that God causeth the night to come in upon the day, and the day to come in upon the night; and that He hath subjected the sun and the moon to laws by which each speedeth along to an appointed goal (31: 29).

It is of Him that the night returneth on the day, and that the day returneth on the night (39: 5).

And of Him is the change of the night and of the day (23: 80).

There is another set of verses which, indicating the relativity of our reckoning of time, suggests the possibility of unknown levels of consciousness;²⁵ but I will content myself with a discussion of the familiar, yet deeply significant, aspect of experience alluded to in the verses quoted above. Among the representatives of contemporary thought, Bergson is the only thinker who has made a keen study of the phenomenon of duration in time. I will first briefly explain to you his view of duration and then point out the inadequacy of his analysis in order fully to bring out the implications of a completer view of the temporal aspect of existence. The ontological problem before us is how to define the ultimate nature of existence. That the universe persists in time is not open to doubt. Yet, since it is external to us, it is possible to be sceptical about its existence. In order completely to grasp the meaning of this persistence in time we must be in a position to study some privileged case of existence which is absolutely unquestionable and gives us the further assurance of a direct vision of duration. Now my perception of things that confront me is superficial and external; but my perception of my own self is internal, intimate, and profound. It follows, therefore, that conscious experience is that privileged case of existence in which we are in absolute contact with Reality, and an analysis of this privileged case is likely to throw a flood of light on the ultimate meaning of existence. What do I find when I fix my gaze on my own conscious experience? In the words of Bergson:²⁶

I pass from state to state. I am warm or cold. I am merry or sad, I work or I do nothing, I look at what is around me or I think of something else. Sensations, feelings, volitions, ideas— such are the

changes into which my existence is divided and which colour it in turns. I change then, without ceasing.

Thus, there is nothing static in my inner life; all is a constant mobility, an unceasing flux of states, a perpetual flow in which there is no halt or resting place. Constant change, however, is unthinkable without time. On the analogy of our inner experience, then, conscious existence means life in time. A keener insight into the nature of conscious experience, however, reveals that the self in its inner life moves from the centre outwards. It has, so to speak, two sides which may be described as appreciative and efficient. On its efficient side it enters into relation with what we call the world of space. The efficient self is the subject of associationist psychology- the practical self of daily life in its dealing with the external order of things which determine our passing states of consciousness and stamp on these states their own spatial feature of mutual isolation. The self here lives outside itself as it were, and, while retaining its unity as a totality, discloses itself as nothing more than a series of specific and consequently numberable states. The time in which the efficient self lives is, therefore, the time of which we predicate long and short. It is hardly distinguishable from space. We can conceive it only as a straight line composed of spatial points which are external to one another like so many stages in a journey. But time thus regarded is not true time, according to Bergson. Existence in spacialized time is spurious existence. A deeper analysis of conscious experience reveals to us what I have called the appreciative side of the self. With our absorption in the external order of things, necessitated by our present situation, it is extremely difficult to catch a glimpse of the appreciative self. In our constant pursuit after external things we weave a kind of veil round the appreciative self which thus becomes completely alien to us. It is only in the moments of profound meditation, when the efficient self is in abeyance, that we sink into our deeper self and reach the inner centre of experience. In the life-process of this deeper ego the states of consciousness melt into each other. The unity of the appreciative ego is like the unity of the germ in which the experiences of its individual ancestors exist, not as a plurality, but as a unity in which every experience permeates the whole. There is no numerical distinctness of states in the totality of the ego, the

multiplicity of whose elements is, unlike that of the efficient self, wholly qualitative. There is change and movement, but change and movement are indivisible; their elements interpenetrate and are wholly non-serial in character. It appears that the time of the appreciative-self is a single "now" which the efficient self, in its traffic with the world of space, pulverizes into a series of "nows" like pearl beads in a thread. Here is, then, pure duration unadulterated by space. The Qur'an with its characteristic simplicity alludes to the serial and non-serial aspects of duration in the following verses:

And put thou thy trust in Him that liveth and dieth not, and celebrate His praise Who in six days created the Heavens and the earth, and what is between them, then mounted His Throne; the God of mercy (25: 58-59).

All things We have created with a fixed destiny: Our command was but one, swift as the twinkling of an eye (54: 49-50).

If we look at the movement embodied in creation from the outside, that is to say, if we apprehend it intellectually, it is a process lasting through thousands of years; for one Divine day, in the terminology of the Qur'an, as of the Old Testament, is equal to one thousand years.²⁷ From another point of view, the process of creation, lasting through thousands of years, is a single indivisible act, "*swift as the twinkling of an eye*". It is, however, impossible to express this inner experience of pure duration in words, for language is shaped on the serial time of our daily efficient self. Perhaps an illustration will further elucidate the point. According to physical science, the cause of your sensation of red is the rapidity of wave motion the frequency of which is 400 billions per second. If you could observe this tremendous frequency from the outside, and count it at the rate of 2,000 per second, which is supposed to be the limit of the perceptibility of light, it will take you more than six thousand years to finish the enumeration.²⁸ Yet in the single momentary mental act of perception you hold together a frequency of wave motion which is practically incalculable. That is how the mental act transforms succession into duration. The appreciative self, then, is more or less corrective of the efficient self, inasmuch as it synthesizes all the "heres" and "nows" – the small changes of space and time, indispensable to the efficient self – into the coherent wholeness of personality. Pure time, then, as revealed

by a deeper analysis of our conscious experience, is not a string of separate, reversible instants; it is an organic whole in which the past is not left behind, but is moving along with, and operating in, the present. And the future is given to it not as lying before, yet to be traversed; it is given only in the sense that it is present in its nature as an open possibility.²⁹ It is time regarded as an organic whole that the Qur'an describes as *Taqdir* or the destiny— a word which has been so much misunderstood both in and outside the world of Islam. Destiny is time regarded as prior to the disclosure of its possibilities. It is time freed from the net of causal sequence— the diagrammatic character which the logical understanding imposes on it. In one word, it is time as felt and not as thought and calculated. If you ask me why the Emperor Humāyūn and Shah Tahmāsp of Persia were contemporaries, I can give you no causal explanation. The only answer that can possibly be given is that the nature of Reality is such that among its infinite possibilities of becoming, the two possibilities known as the lives of Humāyūn and Shah Tahmāsp should realize themselves together. Time regarded as destiny forms the very essence of things. As the Qur'an says: "*God created all things and assigned to each its destiny.*"³⁰ The destiny of a thing then is not an unrelenting fate working from without like a task master; it is the inward reach of a thing, its realizable possibilities which lie within the depths of its nature, and serially actualize themselves without any feeling of external compulsion. Thus the organic wholeness of duration does not mean that full-fledged events are lying, as it were, in the womb of Reality, and drop one by one like the grains of sand from the hour-glass. If time is real, and not a mere repetition of homogeneous moments which make conscious experience a delusion, then every moment in the life of Reality is original, giving birth to what is absolutely novel and unforeseeable. "*Everyday doth some new work employ Him*",³¹ says the Qur'an. To exist in real time is not to be bound by the fetters of serial time, but to create it from moment to moment and to be absolutely free and original in creation. In fact, all creative activity is free activity. Creation is opposed to repetition which is a characteristic of mechanical action. That is why it is impossible to explain the creative activity of life in terms of mechanism. Science seeks to establish uniformities of experience, i.e. the laws of mechanical repetition. Life with its intense feeling of spontaneity constitutes a centre of indetermi-

nation, and thus falls outside the domain of necessity. Hence science cannot comprehend life. The biologist who seeks a mechanical explanation of life is led to do so because he confines his study to the lower forms of life whose behaviour discloses resemblances to mechanical action. If he studies life as manifested in himself, i.e. his own mind freely choosing, rejecting, reflecting, surveying the past and the present, and dynamically imagining the future, he is sure to be convinced of the inadequacy of his mechanical concepts.

On the analogy of our conscious experience, then, the universe is a free creative movement. But how can we conceive a movement independent of a concrete thing that moves? The answer is that the notion of "thing" is derivative. We can derive "things" from movement; we cannot derive movement from immobile things. If, for instance, we suppose material atoms, such as the atoms of Democritus, to be the original Reality we must import movement into them from the outside as something alien to their nature. Where as if we take movement as original, static things may be derived from it. In fact, physical science has reduced all things to movement. The essential nature of the atom in modern science is electricity and not something electrified. Apart from this, things are not given in immediate experience as things already possessing definite contours, for immediate experience is a continuity without any distinctions in it. What we call things are events in the continuity of Nature which thought spatializes and thus regards as mutually isolated for purposes of action. The universe which seems to us to be a collection of things is not a solid stuff occupying a void. It is not a thing but an act. The nature of thought according to Bergson is serial; it cannot deal with movement, except by viewing it as a series of stationary points. It is, therefore, the operation of thought, working with static concepts, that gives the appearance of a series of immobilities to what is essentially dynamic in its nature. The co-existence and succession of these immobilities is the source of what we call space and time.

According to Bergson, then, Reality is a free unpredictable, creative, vital impetus of the nature of volition which thought spatializes and views as a plurality of "things". A full criticism of this view cannot be undertaken here. Suffice it to say that the vitalism of Bergson ends in an insurmountable dualism of will and thought. This is really due to the partial view of intelligence

that he takes. Intelligence, according to him, is a spatializing activity; it is shaped on matter alone, and has only mechanical categories at its disposal. But, as I pointed out in my first lecture, thought has a deeper movement also.³² While it appears to break up Reality into static fragments, its real function is to synthesize the elements of experience by employing categories suitable to the various levels which experience presents. It is as much organic as life. The movement of life, as an organic growth, involves a progressive synthesis of its various stages. Without this synthesis it will cease to be organic growth. It is determined by ends, and the presence of ends means that it is permeated by intelligence. Nor is the activity of intelligence possible without the presence of ends. In conscious experience life and thought permeate each other. They form a unity. Thought, therefore, in its true nature, is identical with life. Again, in Bergson's view the forward rush of the vital impulse in its creative freedom is unilluminated by the light of an immediate or a remote purpose. It is not aiming at a result; it is wholly arbitrary, undirected, chaotic, and unforeseeable in its behaviour. It is mainly here that Bergson's analysis of our conscious experience reveals its inadequacy. He regards conscious experience as the past moving along with and operating in the present. He ignores that the unity of consciousness has a forward looking aspect also. Life is only a series of acts of attention, and an act of attention is inexplicable without reference to a purpose, conscious or unconscious. Even our acts of perception are determined by our immediate interests and purposes. The Persian poet 'Urfi has given a beautiful expression to this aspect of human perception. He says:³³

ز نقص تشنه لبی دان بعقل خویش مناز
دلت فریب گر از جلوه سراب نخورد

If your heart is not deceived by the mirage, be not proud of the
sharpness of your understanding;
for your freedom from this optical illusion is due to your
imperfect thirst.

The poet means to say that if you had a vehement desire for drink, the sands of the desert would have given you the impression of a lake. Your freedom from the illusion is due to the absence of a keen desire for water. You have perceived the thing as it is because you were not interested in perceiving it as it is not. Thus ends and purposes, whether they exist as conscious or subconscious tendencies, form the warp and woof of our conscious experience. And the notion of purpose cannot be

understood except in reference to the future. The past, no doubt, abides and operates in the present; but this operation of the past in the present is not the whole of consciousness. The element of purpose discloses a kind of forward look in consciousness. Purposes not only colour our present states of consciousness, but also reveal its future direction. In fact, they constitute the forward push of our life, and thus in a way anticipate and influence the states that are yet to be. To be determined by an end is to be determined by what ought to be. Thus past and future both operate in the present state of consciousness, and the future is not wholly undetermined as Bergson's analysis of our conscious experience shows. A state of attentive consciousness involves both memory and imagination as operating factors. On the analogy of our conscious experience, therefore, Reality is not a blind vital impulse wholly unilluminated by idea. Its nature is through and through teleological.

Bergson, however, denies the teleological character of Reality on the ground that teleology makes time unreal. According to him "the portals of the future must remain wide open to Reality." Otherwise, it will not be free and creative. No doubt, if teleology means the working out of a plan in view of a predetermined end or goal, it does make time unreal. It reduces the universe to a mere temporal reproduction of a pre-existing eternal scheme or structure in which individual events have already found their proper places, waiting, as it were, for their respective turns to enter into the temporal sweep of history. All is already given somewhere in eternity; the temporal order of events is nothing more than a mere imitation of the eternal mould. Such a view is hardly distinguishable from mechanism which we have already rejected.³⁴ In fact, it is a kind of veiled materialism in which fate or destiny takes the place of rigid determinism, leaving no scope for human or even Divine freedom. The world regarded as a process realizing a preordained goal is not a world of free, responsible moral agents; it is only a stage on which puppets are made to move by a kind of pull from behind. There is, however, another sense of teleology. From our conscious experience we have seen that to live is to shape and change ends and purposes and to be governed by them. Mental life is teleological in the sense that, while there is no far-off distant goal towards which we are moving, there is a progressive formation of fresh ends, purposes, and ideal scales of value as the process of life grows and

expands. We become by ceasing to be what we are. Life is a passage through a series of deaths. But there is a system in the continuity of this passage. Its various stages, in spite of the apparently abrupt changes in our evaluation of things, are organically related to one another. The life-history of the individual is, on the whole, a unity and not a mere series of mutually ill-adapted events. The world-process, or the movement of the universe in time, is certainly devoid of purpose, if by purpose we mean a foreseen end— a far-off fixed destination to which the whole creation moves. To endow the world-process with purpose in this sense is to rob it of its originality and its creative character. Its ends are terminations of a career; they are ends to come and not necessarily premeditated. A time-process cannot be conceived as a line already drawn. It is a line in the drawing—an actualization of open possibilities. It is purposive only in this sense that it is selective in character, and brings itself to some sort of a present fulfilment by actively preserving and supplementing the past. To my mind nothing is more alien to the Qur'anic outlook than the idea that the universe is the temporal working out of a preconceived plan. As I have already pointed out, the universe, according to the Qur'an, is liable to increase.³⁵ It is a growing universe and not an already completed product which left the hand of its maker ages ago, and is now lying stretched in space as a dead mass of matter to which time does nothing, and consequently is nothing.

We are now, I hope, in a position to see the meaning of the verse— *"And it is He Who hath ordained the night and the day to succeed one another for those who desire to think on God or desire to be thankful."*³⁶ A critical interpretation of the sequence of time as revealed in our selves has led us to a notion of the Ultimate Reality as pure duration in which thought, life, and purpose interpenetrate to form an organic unity. We cannot conceive this unity except as the unity of a self— an all-embracing concrete self— the ultimate source of all individual life and thought. I venture to think that the error of Bergson consists in regarding pure time as prior to self, to which alone pure duration is predicable. Neither pure space nor pure time can hold together the multiplicity of objects and events. It is the appreciative act of an enduring self only which can seize the multiplicity of duration— broken up into an infinity of instants— and transform it to the organic wholeness of a

synthesis. To exist in pure duration is to be a self, and to be a self is to be able to say "I am". Only that truly exists which can say "I am". It is the degree of the intuition of "I-amness" that determines the place of a thing in the scale of being. We too say "I am". But our "I-amness" is dependent and arises out of the distinction between the self and the not-self. The Ultimate Self, in the words of the Qur'an, "*can afford to dispense with all the worlds.*"³⁷ To Him the not-self does not present itself as a confronting "other", or else it would have to be, like our finite self, in spatial relation with the confronting "other". What we call Nature or the not-self is only a fleeting moment in the life of God. His "I-amness" is independent, elemental, absolute.³⁸ Of such a self it is impossible for us to form an adequate conception. As the Qur'an says, "*Naught is like Him*"; yet "*He hears and sees.*"³⁹ Now a self is unthinkable without a character, i.e. a uniform mode of behaviour. Nature, as we have seen, is not a mass of pure materiality occupying a void. It is a structure of events, a systematic mode of behaviour, and as such organic to the Ultimate Self. Nature is to the Divine Self as character is to the human self. In the picturesque phrase of the Qur'an it is the habit of Allah.⁴⁰ From the human point of view it is an interpretation which, in our present situation, we put on the creative activity of the Absolute Ego. At a particular moment in its forward movement it is finite; but since the self to which it is organic is creative, it is liable to increase, and is consequently boundless in the sense that no limit to its extension is final. Its boundlessness is potential, not actual. Nature, then, must be understood as a living, ever-growing organism whose growth has no final external limits. Its only limit is internal, i.e. the immanent self which animates and sustains the whole. As the Qur'an says: "*And verily unto thy Lord is the limit.*" (53: 42) Thus the view that we have taken gives a fresh spiritual meaning to physical science. The knowledge of Nature is the knowledge of God's behaviour. In our observation of Nature we are virtually seeking a kind of intimacy with the Absolute Ego; and this is only another form of worship.⁴¹

The above discussion takes time as an essential element in the Ultimate Reality. The next point before us, therefore, is to consider the late Doctor McTaggart's argument relating to the unreality of time.⁴² Time, according to Doctor McTaggart, is unreal because every event is past, present, and future. Queen

Anne's death, for instance, is past to us; it was present to her contemporaries and future to William III. Thus the event of Anne's death combines characteristics which are incompatible with each other. It is obvious that the argument proceeds on the assumption that the serial nature of time is final. If we regard past, present, and future as essential to time, then we picture time as a straight line, part of which we have travelled and left behind, and part lies yet untravelled before us. This is taking time, not as a living creative moment, but as a static absolute, holding the ordered multiplicity of fully-shaped cosmic events, revealed serially, like the pictures of a film, to the outside observer. We can indeed say that Queen Anne's death was future to William III, if this event is regarded as already fully shaped, and lying in the future, waiting for its happening. But a future event, as Broad justly points out, cannot be characterized as an event.⁴³ Before the death of Anne the event of her death did not exist at all. During Anne's life the event of her death existed only as an unrealized possibility in the nature of Reality which included it as an event only when, in the course of its becoming, it reached the point of the actual happening of that event. The answer to Doctor McTaggart's argument is that the future exists only as an open possibility, and not as a reality. Nor can it be said that an event combines incompatible characteristics when it is described both as past and present. When an event X does happen it enters into an unalterable relation with all the events that have happened before it. These relations are not at all affected by the relations of X with other events which happen after X by the further becoming of Reality. No true or false proposition about these relations will ever become false or true. Hence there is no logical difficulty in regarding an event as both past and present. It must be confessed, however, that the point is not free from difficulty and requires much further thinking. It is not easy to solve the mystery of time.⁴⁴ Augustine's profound words are as true today as they were when they were uttered: "If no one questions me of time, I know it: if I would explain to a questioner I know it not."⁴⁵ Personally, I am inclined to think that time is an essential element in Reality. But real time is not serial time to which the distinction of past, present, and future is essential; it is pure duration, i.e. change without succession, which McTaggart's argument does not touch. Serial time is pure duration pulverized by thought— a kind of device by

which Reality exposes its ceaseless creative activity to quantitative measurement. It is in this sense that the Qur'an says: "*And of Him is the change of the night and of the day.*"⁴⁶

But the question you are likely to ask is- "Can change be predicated of the Ultimate Ego?" We, as human beings, are functionally related to an independent world-process. The conditions of our life are mainly external to us. The only kind of life known to us is desire, pursuit, failure, or attainment- a continuous change from one situation to another. From our point of view life is change, and change is essentially imperfection. At the same time, since our conscious experience is the only point of departure for all knowledge, we cannot avoid the limitation of interpreting facts in the light of our own inner experience. An anthropomorphic conception is especially unavoidable in the apprehension of life; for life can be apprehended from within only. As the poet Nāsir 'Alī of Sirhind imagines the idol saying to the Brahmin:

مرا بر صورت خویش آفریدی
برون از خویشتن آخر چه دیدی؟

Thou hast made me after Thine own image!
After all what hast Thou seen beyond Thyself?⁴⁷

It was the fear of conceiving Divine life after the image of human life that the Spanish Muslim theologian Ibn Hazm hesitated to predicate life of God, and ingeniously suggested that God should be described as living, not because He is living in the sense of our experience of life, but only because He is so described in the Qur'an.⁴⁸ Confining himself to the surface of our conscious experience and ignoring its deeper phases, Ibn Hazm must have taken life as a serial change, a succession of attitudes towards an obstructing environment. Serial change is obviously a mark of imperfection; and, if we confine ourselves to this view of change, the difficulty of reconciling Divine perfection with Divine life becomes insuperable. Ibn Hazm must have felt that the perfection of God can be retained only at the cost of His life. There is, however, a way out of the difficulty. The Absolute Ego, as we have seen, is the whole of Reality. He is not so situated as to take a perspective view of an alien universe; consequently, the phases of His life are wholly determined from within. Change, therefore, in the sense of a movement from an imperfect to a relatively perfect state, or vice versa, is obviously inapplicable to His life. But change in this sense is not the only possible form of

life. A deeper insight into our conscious experience shows that beneath the appearance of serial duration there is true duration. The Ultimate Ego exists in pure duration wherein change ceases to be a succession of varying attitudes, and reveals its true character as continuous creation, "*untouched by weariness*"⁴⁹ and unseizable "*by slumber or sleep*".⁵⁰ To conceive the Ultimate Ego as changeless in this sense of change is to conceive Him as utter inaction, a motiveless, stagnant neutrality, an absolute nothing. To the Creative Self change cannot mean imperfection. The perfection of the Creative Self consists, not in a mechanistically conceived immobility, as Aristotle might have led Ibn Hazm to think. It consists in the vaster basis of His creative activity and the infinite scope of His creative vision. God's life is self-revelation, not the pursuit of an ideal to be reached. The "not-yet" of man does mean pursuit and may mean failure; the "not-yet" of God means unfailing realization of the infinite creative possibilities of His being which retains its wholeness throughout the entire process.

In the Endless, self-repeating
flows for evermore The Same.
Myriad arches, springing, meeting,
hold at rest the mighty frame.
Streams from all things love of living,
grandest star and humblest clod.
All the straining, all the striving
is eternal peace in God.⁵¹ (Goethe)

Thus a comprehensive philosophical criticism of all the facts of experience on its efficient as well as appreciative side brings us to the conclusion that the Ultimate Reality is a rationally directed creative life. To interpret this life as an ego is not to fashion God after the image of man. It is only to accept the simple fact of experience that life is not a formless fluid, but an organizing principle of unity, a synthetic activity which holds together and focalizes the dispersing dispositions of the living organism for a constructive purpose. The operation of thought which is essentially symbolic in character veils the true nature of life, and can picture it only as a kind of universal current flowing through all things. The result of an intellectual view of life, therefore, is necessarily pantheistic. But we have a first-hand knowledge of

the appreciative aspect of life from within. Intuition reveals life as a centralizing ego. This knowledge, however imperfect as giving us only a point of departure, is a direct revelation of the ultimate nature of Reality. Thus the facts of experience justify the inference that the ultimate nature of Reality is spiritual, and must be conceived as an ego. But the aspiration of religion soars higher than that of philosophy. Philosophy is an intellectual view of things; and, as such, does not care to go beyond a concept which can reduce all the rich variety of experience to a system. It sees Reality from a distance as it were. Religion seeks a closer contact with Reality. The one is theory; the other is living experience, association, intimacy. In order to achieve this intimacy thought must rise higher than itself, and find its fulfilment in an attitude of mind which religion describes as prayer— one of the last words on the lips of the Prophet of Islam.⁵²

p. 168.

⁴¹ Cf. William James, *op. cit.*, p. 15.

⁴² *Ibid.*, p. 21.

⁴³ The designation 'apostle' (*rasūl*) is applied to bearers of divine revelations which embody a new doctrinal system or dispensation; a 'prophet' (*nabi*), on the other hand, is said to be one whom God has entrusted with enunciation and elucidation of ethical principles on the basis of an already existing dispensation, or of principles common to all dispensations. Hence, every apostle is a prophet as well, but every prophet is not an apostle.

⁴⁴ Cf. Lecture VII, pp. 143-44, where this point is reiterated.

⁴⁵ E. W. Hocking, *op. cit.*, pp. 106-07.

Lectures II: The Philosophical Test of the Revelations of Religious Experience

¹ Cf. E. S. Haldane and G. R. T. Ross (trans.), *The Philosophical Works of Descartes*, II, 57.

² Cf. *The Critique of Pure Reason*, (trans.) N. Kemp Smith, p. 505.

³ The logical fallacy of assuming in the premises of that which is to be proved in the conclusion.

⁴ Qur'an, 41: 53, also 51: 20-21.

⁵ *Ibid.*, 57: 3.

⁶ Cf. R. F. A. Hoernle, *Matter, Life, Mind and God*, pp. 69-70.

⁷ Cf. H. Barker, article: 'Berkeley' in *Encyclopaedia of Religion and Ethics*, especially the section: 'Metaphysics of Immaterialism'; see also Lecture IV, p. 83, for Allama Iqbal's acute observations in refutation of 'the hypothesis of matter as an independent existence.'

⁸ Cf. A. N. Whitehead, *The Concept of Nature*, p. 30. This is what Whitehead has called the 'theory of bifurcation of Nature' based on the dichotomy of 'simply located material bodies of Newtonian physics' and the 'pure sensations' of Hume. According to this theory, Nature is split up into two disparate or isolated parts; the one known to us through our immediate experiences of colours, sounds, scents, etc., and the other, the world of unperceived scientific entities of molecules, atoms, electrons, ether, etc. - colourless, soundless, unscented - which so act upon the mind through 'impact' as to produce in it the 'illusions' of sensory experiences in which it delights. The theory thus divides totality of being into a reality which does not appear and is thus a mere 'conjecture' and appearances which are not real and so are mere 'dream'. Whitehead outright rejects 'bifurcation' and insists that the red glow of sunset is as much 'part of Nature' as the vibrations of molecules and that the scientist cannot dismiss the red glow as a 'psychic addition' if he is to have a coherent 'Concept of Nature'. This view of Whitehead, the eminent mathematician, expounded by him in 1920 (i.e. four years

before his appointment to the chair of Philosophy at Harvard at the age of sixty-three) was widely accepted by the philosophers. Lord Richard Burton Haldane, one of the leading neo-Hegelian British philosophers, said to be the first philosophical writer on the Theory of Relativity, gave full support to Whitehead's views on 'bifurcation' as well as on 'Relativity' in his widely-read *Reign of Relativity* to which Allama Iqbal refers in Lecture III, p. 57, and tacitly also perhaps in Lecture V. The way Lord Haldane has stated in this work his defence of Whitehead's views on Relativity (enunciated by him especially in Concept of Nature) as against those of Einstein, one is inclined to surmise that it was perhaps *Reign of Relativity* (incidentally also listed at Sr. No. 276 in the *Descriptive Catalogue of Allama's Personal Library*) more than any other work that led Allama Iqbal to make the observation: 'Whitehead's view of Relativity is likely to appeal to Muslim students more than that of Einstein in whose theory time loses its character of passage and mysteriously translates itself into utter space' (Lecture V, p. 106).

⁹ Bertrand Russell, *The Basic Writings of Bertrand Russell*, Vol. 10, Taylor and Francis, 2009, p. 215.

¹⁰ Allama Iqbal states here Zeno's first and third arguments; for all the four arguments of Zeno on the unreality of motion, see John Burnet, *Greek Philosophy; Thales to Plato*, p. 84; they generally go by names; the 'dichotomy'; the 'Achilles'; the 'arrow'; and the 'stadium'. It may be added that our primary source for Zeno's famous and controversial arguments is Aristotle's *Physics* (VI, 9. 239b) which is generally said to have been first translated into Arabic by Ishāq b. Hunain (c. 845-910/911), the son of the celebrated Hunain b. Ishāq. Aristotle's *Physics* is also said to have been commented on later by the Christian Abū 'Alī al-Hasan b. al-Samh (c. 945-1027); cf. S. M. Stern, 'Ibn al-Samh', *Journal of the Royal Asiatic Society* (1956), pp. 31-44. Even so it seems that Zeno's arguments as stated by Aristotle were known to the Muslim thinkers much earlier, maybe through Christian-Syriac sources, for one finds the brilliant Mu'tazilite Nazzām (d. 231/845) meeting Zeno's first argument in terms of his ingenious idea of *tafrāh* or jump referred to by Allama Iqbal in Lecture III, pp. 55-56.

¹¹ Cf. T. J. de Boer, article 'Atomic Theory (Muhammadan)', in *Encyclopaedia of Religion and Ethics*, II, 202-03; D. B. Macdonald, *Development of Muslim Theology*, pp. 201 ff. and Majid Fakhry, *Islamic Occasionalism*, pp. 33-43.

¹² Cf. *Kitāb al-Fisal*, V, 92-102.

¹³ For Bergson's criticism of Zeno's arguments cf. *Creative Evolution*, pp. 325-30, and also the earlier work *Time and Free Will*, pp. 113-15.

¹⁴ Cf. A. E. Taylor, article 'Continuity' in *Encyclopaedia of Religion and Ethics*, IV, especially pages 96b-98c focusing on Cantor.

¹⁵ Cf. Bertrand Russell, *Our Knowledge of the External World*, pp. 169-88; also *Mysticism and Logic*, pp. 84-91.

¹⁶ This is not Russell's own statement but that of H. Wildon Carr made during the course of his exposition of Russell's views on the subject; see Wildon Carr, *The General Principle of Relativity*, p. 36.

¹⁷ Views of H. Wildon Carr and especially of Sir T. Percy Nunn on relativity in the present context are to be found in their symposium papers on 'The Idealistic Interpretation of Einstein's Theory' published in the *Proceedings of the Aristotelian Society*, N. S. XXII (1921-22), 123-27 and 127-30. Wildon Carr's doctrine of Monadistic Idealism, however, is to be found much more fully expounded in his *General Principle of Relativity* (1920) and *A Theory of Monads: Outlines of the Philosophy of the Principle of Relativity* (1922); passages from both of these books have been quoted in the present Lecture (cf. notes 16 and 23 below).

T. Percy Nunn, best known as an educationist, wrote little philosophy; but whatever little he wrote, it made him quite influential with the leading contemporary British philosophers: Whitehead, Samuel Alexander, Russell, Broad, and others. He is said to have first formulated the characteristic doctrines of neo-Realism, an important philosophical school of the century which had its zealot and able champions both in England and in the United States. His famous symposium paper: 'Are Secondary Qualities Independent of Perception?' read in a meeting of the Aristotelian Society in 1909 was widely studied and discussed and as J. Passmore puts it: 'it struck Bertrand Russell's roving fancy' (*A Hundred Years of Philosophy*, p. 258). It is significant to note that Nunn's correction put on Wildon Carr's idealistic interpretation of relativity in the present passage is to be found almost in the same philosophical diction in Russell's valuable article: 'Relativity; Philosophical Consequences', in *Encyclopaedia Britannica* (1953), XIX, 99d, Russell says: 'It is a mistake to suppose that relativity adopts any idealistic picture of the world. . . . The "observer" who is often mentioned in expositions of relativity need not be a mind, but may be a photographic plate or any kind of recording instrument.'

¹⁸ On this rather debatable interpretation of Einstein's theory of relativity see Dr. M. Razi-ud-din Siddiqi, 'Iqbal's Conception of Time and Space' in *Iqbal as A Thinker*, pp. 29-31, and Philipp Frank, 'Philosophical Interpretations and Misinterpretations of the Theory of Relativity', in H. Feigl and Mary Brodbeck (eds.), *Readings in the Philosophy of Science*, pp. 222-26, reprinted from his valuable work, *Interpretations and Misinterpretations of Modern Physics* (1938).

¹⁹ Cf. Hans Reichenbach, 'The Philosophical Significance of the Theory of Relativity', in P. A. Schilpp (ed.), *Albert-Einstein: Philosopher-Scientist*, section iv.

²⁰ Cf. *Tertium Organum*, p. 33f.

²¹ Compare this with Bergson's view of consciousness in *Creative Evolution*, p. 189f.

²² This is a passage from J. S. Haldane's Symposium Paper: 'Are Physical, Biological and Psychological Categories Irreducible?' read in July 1918 at the joint session of the Aristotelian Society, the British Psychological Society and the Mind Association; see *Proceedings of the Aristotelian Society*, XVII, (1917-1918), 423-24, reproduced in H. Wildon Carr (ed.), *Life and Finite Individuality*, pp. 15-16.

²³ *A Theory of Monads*, pp. 5-6.

²⁴ Cf. Lecture I, pp. 8-11.

²⁵ Cf. the Qur'anic verses quoted on p. 39; to these may be added 22: 47, 32: 5, and 70: 4- according to this last verse a day is of the measure of fifty thousand years.

²⁶ *Creative Evolution*, p. 1.

²⁷ The Qur'an says: 'And behold a day with thy sustainer is as a thousand years of your reckoning' (22: 47). So also, according to the Old Testament: 'One day is with the Lord as a thousand years' (Psalms, xc. 4).

²⁸ According to Bergson, this period may be as long as 25,000 years; cf. *Matter and Memory*, pp. 272-73.

²⁹ For further elucidation of future as an 'open possibility' cf. Lecture III, p. 63.

³⁰ See among others the Qur'anic verses 25: 2; 54: 49 and the earliest on this subject in the chronological order of the surahs: 87: 2-3. These last two short verses speak of four Divine ways governing all creation and so also man, viz. God's creating a thing (*khalaqa*), making it complete (*fa sawwā*), measuring out its attributes or determining its nature (*qaddara*) and guiding it to its fulfilment (*fa hadā*).

Allama Iqbal's conception of destiny (*taqdīr*) as 'the inward reach of a thing, its realizable possibilities which lie within the depth of its nature, and serially actualize themselves without any feeling of external compulsion' [italics mine] understood in terms of the Divine ways embodied in the above two short verses, seems to be singularly close to the text and the unique thought-forms of the Qur'an. There is no place in this conception of destiny for the doctrine of Fatalism as preached by some Muslim scholastic theologians whose interpretation of the verses of the Qur'an for this purpose is more often a palpable misinterpretation (Lecture IV, p. 89); nor for the doctrine of determinism as expounded by the philosophers who, cut off from the inner life-impulse given by Islam, think of all things in terms of the inexorable law of cause and effect which governs the human ego as much as the 'environment' in which it is placed. They fail to realize that the origin of the law of 'cause and effect' lies in the depths of the

transcendental ego which has *devised it* or *caused it* under divine guidance to realize its divinely assigned destiny of understanding and mastering all things (p. 86); also cf. *Asrār-i Khudī*, many verses especially those in the earlier sections.

³¹ Qur'an, 55: 29.

³² Cf. Lecture I, p. 5.

³³ See Shiblī Nu'mānī, *Shi'r al-'Ajam*, III, 114.

³⁴ This is a reference to pp. 33-36.

³⁵ Cf. Lecture I, p. 8 and note 23.

³⁶ The Qur'anic verse 25: 62 quoted on p. 37.

³⁷ Reference is to the Qur'anic expression: *Ghanīyyun 'anī 'l-'ālamīn* found in verses 3: 97 and 29: 6.

³⁸ This is a reference to the Qur'anic verse 20: 14: 'Verily, I- I alone- am God; there is no deity save Me. Hence, worship Me alone, and be constant in prayer, so as to remember Me.'

³⁹ Qur'an, 42: 11.

⁴⁰ The reference is to the Qur'anic expression *sunnat Allāh* found in 33: 62; 35: 43; 40: 84-85; 48: 23, etc.

⁴¹ Cf. Lecture III, p. 13, where Allama Iqbal observes: 'The scientific observer of Nature is a kind of mystic seeker in the act of prayer.'

⁴² McTaggart's argument referred to here was advanced by him in his article; 'The Unreality of Time' in *Mind* (N. S.), XVII/68 (October 1908), 457-74, re-produced later in *Nature of Existence*, II, 9-31, as well as in the posthumous *Philosophical Studies*, pp. 110-31. McTaggart has been called 'an outstanding giant in the discussion of the reality or unreality of time' and his aforesaid article has been most discussed in recent philosophical literature on Time. Of articles in defence of McTaggart's position, mention may be made of Michael Dummett: 'A Defence of McTaggart's Proof of the Unreality of Time' in *Philosophical Review*, XIX (1960), 497-504. But he was criticised by C. D. Broad, the greatest expositor of his philosophy (cf. his commentary: *Examination of McTaggart's Philosophy*, Vol. I, 1933, and Vol. II in two parts, 1938), in *Scientific Thought*, to which Allama Iqbal has referred in the present discussion, as well as in his valuable article: 'Time' in *Encyclopaedia of Religion and Ethics*, XII, 339a; and earlier than Broad by Reyburn in his article 'Idealism and the Reality of Time' in *Mind* (Oct. 1913), pp. 493-508 which has been briefly summarized by J. Alexander Gunn in *Problem of Time: A Historical and Critical Study*, pp. 345-47.

⁴³ Cf. C. D. Broad, *Scientific Thought*, p. 79.

⁴⁴ This is much like Broad's admitting at the conclusion of his examination of McTaggart's argument that time is the hardest knot in the whole of philosophy', *ibid.*, p. 84.

⁴⁵ *The Confessions of St. Augustine*, xi, 17; cf. O. Spengler, *The Decline of the*

West, I, 140, where Augustine's observation is quoted in connection with 'destiny'.

⁴⁶ Reference is to the Qur'anic verse 23: 80 quoted on p. 37 above.

⁴⁷ Cf. M. Afzal Sarkhwush, *Kalimāt al-Shu'arā'*, p. 77, where this verse is given as under:

مرا بر صورت خود آفریدی
 برون از نقش خود آخر چه دیدی؟

⁴⁸ Cf. *Kitāb al-Fisal*, II, 158; also I. Goldziher, *The Zāhirīs*, pp. 113ff.

⁴⁹ Qur'an, 50: 38.

⁵⁰ Ibid., 2: 255.

⁵¹ Goethe, *Alterswerke* (Hamburg edition), I, 367, quoted by Spengler, *op. cit.*, on fly-leaf with translation on p. 140. For locating this passage in Goethe's *Alterswerke*, I am greatly indebted to Professor Dr. Annemarie Schimmel.

⁵² Reference here is to the Prophet's last words: *al-salātu, al-salātu wa mā malakat aimānukum* (meaning: be mindful of your prayers and be kind to persons subject to your authority) reported through three different chains of transmitters in Ahmad b. Hanbal's *Musnad*: VI, 290, 311 and 321.

Lecture III: The Conception of God

¹ Cf. *Creative Evolution*, p. 13; also pp. 45-46.

² Ibid., p. 14.

³ See Qur'an, for example, 2: 163, 4: 171, 5: 73, 6: 19, 13: 16, 14: 48, 21: 108, 39: 4 and 40: 16, on the Unity of Allah and 4: 171, 6: 101, 10: 68, 17: 111, 19: 88-92 emphatically denying the Christian doctrine of His sonship.

⁴ Cf. L. R. Farnell, *The Attributes of God*, p. 56.

⁵ The full translation here is 'a glistening star', as required by the *nass* of the Qur'an, '*Kaukabun durriyun*'.

⁶ On this fine distinction of God's infinity being intensive and not extensive, see further Lecture IV, p. 94.

⁷ For the long-drawn controversy on the issue of the creation of the universe, see, for instance, Ghazālī, *Tahāfat al-Falāsifah*, English translation by S. A. Kamālī: *Incoherence of the Philosophers*, pp. 13-53 and Ibn Rushd, *Tahāfat al-Tahāfah*, English translation by Simon van den Bergh: *The Incoherence of the Incoherence*, pp. 1-69. A more accurate and annotated translation with the critical text of the *Tahāfat al-Falāsifah* was made by Michael E. Marmura in his *Incoherence of the Philosophers*, Bagham University Press, Rep. Suhail Academy, Lahore, 2007. Cf. also G. F. Hourani, 'Alghazālī and the Philosophers on the Origin of the World', *The Muslim World*, XLVII/2(1958), 183-91, 308-14 and M. Saeed Sheikh, 'Al-Ghazālī: Metaphysics', *A History of Muslim Philosophy*, ed.

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