The Philosophy of Bergson: the Data of Consciousness.

By ARTHUR ROBINSON, M.A., D.C.L.,
Professor of Logic in the University of Durham.

According to M. Bergson, the intelligence is an instrument of action; its function is to make man at home in the material world in which he finds himself. Conscious life begins in a world of things to which it has to adapt itself or perish; it looks outwards, and not inwards, and it looks with a view to action. Introspection is a later luxury. Intelligence works by concepts, and these were at first concepts of things in space, separate or separable, and exterior to one another. So concepts grew up, well defined and exclusive, like things side by side in space. When the intelligence is directed inwards, it tends—in virtue of its own nature and that of language which has developed in its service—to introduce into consciousness the same spatial and quasi-spatial separations and distinctions which it has found useful in dealing with matter. In the words of M. Gillouin, "Quand nous croyons nous contempler sans voiles, entre notre intelligence et nous il y a tout l'univers."

Since the function of intelligence is "to think matter," it is inadequate by itself as an instrument for philosophy; it cuts up the world into concepts which it treats as mutually exclusive and hitched together by various relations, and, having once dissolved the continuous, falls into endless contradictions in its endeavour to perform the impossible task of getting continuity out of the discrete. So Bergson breaks with those who assume that the immediate data of experience are disconnected, and leaves the intellectualist at his permanent employment of weaving ropes of sand.

But Bergson is not of those who turn their backs on science when they philosophize. Science is an advance on ordinary knowledge both in breadth and exactness, but there is something in reality which science has failed to grasp. The
machine theory of things, which seems so adequate in the realm of physics, fails when confronted with the problems of life and of consciousness. The scientist, as well as the philosopher, raises the question, "Is there one science of Nature?"

Reality must be reached by science and philosophy together. Intelligence is the instrument of science; the instrument of philosophy is intuition. Life overflows the categories of the intelligence, the "frames" which have been shaped for the not-living; it escapes the devices of induction and deduction, but it does not transcend experience: "Elle se saisit absolument elle-même dans une intuition qui, incomplète en fait, peut se compléter indéfiniment" (Journal of Philosophy, vol. vii., p. 388).

What is intuition? Probably no harder question can be asked about the philosophy of Bergson, particularly when a full discussion is impossible. Put negatively, it is neither reflective nor analytic; positively, it is the immediate experience of conscious life when all traces of the machinery of intelligence have been weeded out; it is knowledge of what is lived, and not merely thought.

Naturally enough, then, Bergson's critical inquiry starts with an exposition of the errors which have arisen in psychology through the attempt to treat consciousness as if the ordinary machinery of intelligence and the methods of exact science were adequate to explain it. Psychology, as Ebbinghaus remarks, has a long past and a short history. It began when mental processes first began to be named, and yet to-day, doubtful even of its purpose and its scope, it still lags behind its sister-sciences. Psychology and philosophy have hindered almost as much as they have helped each other. Philosophy has vainly endeavoured to reduce reality to one or other of the elements into which psychology analyzes experience—to thought or feeling or will. Psychology has floundered among difficulties, such as the relation of mind and body, forced upon it by a philosophy both inadequate and confused; yet its position is unique among sciences, standing as it does where the ways divide to the inner and outer life.
Bergson's "Essai sur les données immédiates de la conscience" was published in 1889. It is now in its seventh French edition, and has recently been translated into English under the title, "Time and Free Will." I propose to attempt an outline of the argument of this book. The main characteristics of the new way in philosophy will, I hope, come to clearer light than by an endeavour to give in a space necessarily brief a bare outline of the whole.

This essay treats of free-will; and it says no little for the philosophic endowments of M. Bergson that he laid the foundation-stone of his reputation by his discussion of a matter of such ill-omen. Philosophers, like Milton's devils, have

"Sat on a Hill retir'd
In thoughts more elevate, and reason'd high,
Of Providence, Foreknowledge, Will, and Fate.
Fixt Fate, free will, foreknowledge absolute,
And found no end, in wandering mazes lost."

As preliminary to the main issue, the nature of intensity and of duration are first discussed. The main thesis is that the problem of freedom has arisen from a question wrongly put—from a confusion of quality and quantity, of succession and simultaneity, of duration and extensity. In other words, the intelligence, adapted to the outer world, and full of "frames" acquired therefrom, has been uncritically turned upon the inner life, to which it is inadequate from its very nature; the result is misunderstanding and hopeless perplexity.

First, then, of intensity. In ordinary language the words "more" and "less" or other equivalent terms are applied to states of consciousness. We say our sorrow or our joy is greater or less to-day than it was yesterday; our headache is more or less intense. What, precisely, do we mean? Apparently we mean an increase or decrease in quantity.

Many psychologists hold that intensity is quantity of a sort—continuous quantity. The quantity thus attributed to psychical states is not discrete. It is not made up of separate or separable units; it is not spatial quantity, but still it is quantity; it is increase or decrease of a psychical state qualitatively the same.
Intensive and extensive magnitude differ in that the latter can, and the former cannot, be resolved into constitutive units; they agree in that the terms "more" or "less" can be applied to each of them.

But psycho-physics goes still further; it claims to have established the existence of a unit of sensation. The situation is briefly as follows:

A stimulus may be applied to a sense-organ, and yet not necessarily produce a sensation; it must reach a certain degree of intensity before it so affects consciousness, and this point is called the threshold or limen. A stimulus may become so intense as to change the sensation into pain; this point is called the upper limit of sensation. The threshold is not an absolutely fixed point; it is raised, for instance, when preceding or simultaneous impressions compete with the stimulus; it is lowered by custom. E. H. Weber, Professor of Physiology at Leipsic, discovered that there is just as much difficulty in distinguishing between the pressure of 29 and 30 half-ounces as between that of 29 and 30 drachms, in spite of the fact that the difference of weight in the first case is four times as great as it is in the second. Such experiments were the origin of Weber's Law: The increase of the stimulus necessary to produce an increase of the sensation bears a constant ratio to the total stimulus. For instance, in the case of light, an increase of one-hundredth in the stimulus produces a discernible difference in the sensation—that is, approximately and on the average. Fechner stated a formula for the ratio of the effect of a stimulus to the preceding stimulus: The strength of the stimulus must increase in geometrical progression in order that the sensation may increase in arithmetical progression. So, in order that a sensation may increase as 1, 2, 3, 4, the stimulus must increase as 1, 2, 4, 8.1 But Fechner's most important step consisted in assuming that the same sort of quantity exists on the psychical side as exists on the physical side of the equation—viz., discrete quantity. He found his unit in the just-discernible increment in a given sensation, and held that this sensation-unit is the same through-

1 This rule only holds for stimuli of medium strength.
out all the range of intensities, and that all sensations are sums of it. The fatal weakness of this theory lies in the fact that it contradicts the evidence of consciousness. We are never aware that a weak sensation, say of light, is contained in a stronger one, or that there are ten feeble sounds in a loud sound, or that the difference between two sensations is expressible in quantitative units. On the contrary, each sensation is, as Professor James says, "a complete integer." The "just-discernible increment" is really a judgment of difference. The emergence of a difference does not necessarily preclude a sensation from being regarded as "the same," for what is called identity in a sensation is not bare and total identity.

Bergson agrees with neither of these views. His position is that the notion of intensity is a confusion of quality with quantity in the case of conscious phenomena taken separately; it is space introduced into individual psychic states which are not spatial.

Intensity is resolved either into an "acquired" or a "confused" perception. It is the former in the case of sensations which can be set over against an external object as their cause. If the light in a room be increased until an observer says, "The light is more intense," is his experience a purely quantitative one? No; there are qualitative changes in the shading, colour, etc., of the illuminated objects on which he gazes, and he substitutes a "quantitative interpretation" for a "qualitative impression." The judgment of quality is translated into a judgment of quantity.

On the other hand, in deeper psychical processes intensity is explained as a "confused perception." It arises, not from the idea of the external cause, as in the case of sensations, but from the larger or smaller number of simpler psychical states involved; in a word, it is irradiation. A joy which becomes more "intense" is a joy which spreads through more and more of the elements of our consciousness, until perhaps there is not a thought, not a feeling, not an action, which is untinged by its warmth.

The importance of this discussion lies in the fact that, if psychical states were quantitative, they would fall under the
sway of mechanism; for where quantity is, there is determination, and a quantitative interpretation of intensity is a step towards regarding the mind as an aggregate of parts.

Thus Bergson takes his first step by showing the latent confusion between quantity and quality in the notion of intensity.

Our psychic life is thus a qualitative, not a quantitative, multiplicity. What does this mean? How can there be a multiplicity which is not discrete or quantitative? Whenever we count, two conditions must be fulfilled: first, it must be possible to separate the things counted; secondly, the things counted must somehow exist side by side until they are counted. They may exist side by side in real space or in ideal space, but in nothing else is "side-by-sideness" possible. If you count the window-panes, you count in real space; if you count the strokes of a clock, in ideal.

How, then, do we count our own psychic states? We regard them as external to one another, which they are not, and we treat them as existing simultaneously. But consider psychic process before this spatial analysis. Then, says Bergson, "we must admit two possible senses of the word 'distinguish'—two conceptions, the one qualitative and the other quantitative, of the difference between same and other. Sometimes this multiplicity, this distinctness, this heterogeneity contains number only potentially, as Aristotle would have said. Consciousness, then, makes a qualitative discrimination without any further thought of counting the qualities, or even of distinguishing them as several. In such a case we have multiplicity without quantity" ("Time and Free Will," pp. 121, 122).

When we study our inner selves, therefore, we must not use the idea of a discrete multiplicity; it in a way distorts the essence of the psychic process which our object is to grasp.

These discussions clear the way for an investigation of time. In the external world, says Bergson, there is only simultaneity, and not duration. It is misleading to say that in the changes of this outer world there is succession; events succeed one another only in a consciousness which remembers.
Time, which can be measured, is a blend of space, which is external, and of that internal and purely qualitative change which Bergson calls "durée réelle." In so far, then, as the notion of time is spatial, in so far as it represents consciousness as subject to a sharp division into a past, present, and future compartment, it is for philosophic purposes misleading, however useful it may be practically as a convenient symbolism.

It is scarcely possible to find a word which, in its general usage at any rate, represents what Bergson means by "durée réelle." "Time," as we often use it, exactly leaves out what it should leave in—the individuality of the experience. For there are as many different "durations" as there are individual experiences. You and I may have a conventional "time" in common; the inner experience which we live is different, and the most essential part of the difference is what we must understand by "duration." Yet it is just this absolute inwardness of the psychic life before which the intelligence is powerless, and therefore it is here that science fails. It fails because it leaves out duration, the "process of organization or interpenetration of conscious states."

Naturally, in many ordinary expressions we use "time" in senses which more nearly approach "duration"—e.g., "Time flies" when we are interested; "Time hangs heavily" when we are bored.

Perhaps the clearest, certainly the shortest, explanation is to be found in Bergson's lectures at Oxford in May, 1911 ("La Perception du Changement," p. 26): "Je me bornerai donc à dire, pour répondre à ceux qui voient dans cette 'durée réelle' je ne sais quoi d'ineffable et de mystérieux, qu'elle est la chose la plus claire du monde; la durée réelle est ce que l'on a toujours appelé le temps, mais le temps perçu comme indivisible. Que le temps implique la succession, je n'en disconviens pas. Mais que la succession se présente d'abord à notre conscience comme la distinction d'un 'avant' et d'un 'après' juxtaposés, c'est ce que je ne saurais accorder."

The nearest we can get to an experience of "pure succession" is in listening to a melody; the impression is due to the con-
tinuity of the melody. Divide it into notes "before" and "after" one another, and the interpenetration of pure succession is gone—duration is translated into space.

The misconceptions which underlie the free-will controversy are of the same nature as those which have been shown to be present in the confusion of intensity with quantity, and of abstract or spatialized time with pure duration. Both determinism and indeterminism are saddled with an insoluble riddle, because both begin, not with the facts, but with a false interpretation of them.

Determinism, according to Bergson, has two forms—physical and psychological. The former is reducible to the latter, for physical determinism involves a psychological hypothesis. According to physical determinism, all the particles of inorganic matter act and react on one another in ways susceptible of definite calculation; living matter also is subject to similar determinations. State to a mathematician the conditions of the sum, the position of the atoms of your body at this moment, and the position of those atoms exterior to your body which might influence it; he should be able to tell you your past, present, and future with the same precision with which he would calculate the position of a star.

Though the adoption of the principle of the conservation of energy involves the position that physiological phenomena are necessarily determined, a further demonstration is required in the case of conscious states. It would have to be proved that a definite psychic state corresponds to a definite physical state. All that has been done amounts to proving that in certain cases (and those almost independent of volition) the physical and the psychical series are parallel; but this by no means proves that they are parallel throughout.

Physical determinism, however, finds reinforcement in psychology. We naturally explain an action by stating its motive; further, the phenomena of association lend some colour to the view of the determinist. Hence it is easy "to hold that the drama enacted in the theatre of consciousness is a literal and even slavish translation of some scenes performed by the
molecules and atoms of organized matter. The physical determinism which is reached in this way is nothing but psychological determinism seeking to verify itself and fix its own outlines by an appeal to the sciences of Nature" ("Time and Free Will," p. 149).

If the law of the conservation of energy be true, then our movements are determined though our consciousness may not be. Bergson's position is that the law of the conservation of energy cannot be applied to living beings or to psychic processes; its application presupposes a system which can return to its original state. "Let us note that the law of the conservation of energy can only be intelligibly applied to a system of which the points, after moving, can return to their former positions. This return is at least conceived of as possible, and it is supposed that under these conditions nothing would be changed in the original state of the system as a whole or of its elements. In short, time cannot bite into it" ("Time and Free Will," p. 152). But consider living creatures and consciousness: for both history counts for something; "duration seems to act like a cause." "A sensation, by the mere fact of being prolonged, is altered to the point of becoming unbearable. The same does not here remain the same, but is reinforced and swollen by the whole of its past" (ibid., p. 153).

In effect, to apply this law to life and consciousness is to confuse concrete duration and abstract time. It is precisely to ignore those elements which differentiate life and consciousness from matter; and to ignore what one sets out to understand is an odd path to knowledge. "No machine profits by experience, nor trades with time, as organisms do. Therefore it is that the formulæ which serve to redescribe the activity of a machine will not suffice for living creatures, which demand a historical explanation" (Geddes and Thomson, "Evolution"). Thus physical determinism, in the last resort, implies a psychological theory, and is psychological determinism.

Psychological determinism implies an associationist psychology, and this involves a wrong conception of the self, representing it "as a collection of psychic states, the strongest
of which exerts a prevailing influence and carries the others with it. The doctrine thus sharply distinguishes coexisting psychic phenomena from one another" ("Time and Free Will," p. 159). This is the fatal error into which both determinists and their opponents have fallen. They argue as if motive and will were entities outside one another, each with a sort of existence of its own; and this is the spatializing process once more. Bergson, on the other hand, distinguishes between a multiplicity of juxtaposition and a multiplicity of fusion or interpenetration. In consciousness there is a plurality of elements, but they are not perceived as a plurality unless and until they are spread out in ideal space, and then they have ceased to be what they originally were, and have become symbols. "But because our reason, equipped with the idea of space and the power of creating symbols, draws these multiple elements out of the whole, it does not follow that they were contained in it. For within the whole they did not occupy space, and did not care to express themselves by means of symbols; they permeated and melted into one another. Associationism thus makes the mistake of constantly replacing the concrete phenomenon which takes place in the mind by the artificial reconstruction of it given by philosophy, and of thus confusing the explanation of the fact with the fact itself" ("Time and Free Will," p. 163).

It is those phenomena which happen, as it were, on the fringe of the self and the external world that association fits; but we have accustomed ourselves so to strip psychic processes of their personal and individual elements that we apply the term "love" to many forms of "love," robbing them of their vitality and reducing them to a colourless, impersonal form. The novelist and the poet add personality to them in a way, but all their additions are set side by side, and what is side by side can never adequately represent what in its essence interpenetrates. There remains the chasm between a life lived and a life described.

A deep feeling—love or hate—is not something outside the
soul which drives it by an almost irresistible impetus; rather it is the soul, for in it appear all the contents of consciousness. “To say that the soul is determined under the influence of any one of these feelings is thus to recognize that it is self-determined” (“Time and Free Will,” p. 165).

Our freedom, then, is not absolute. The soul is free in proportion as it acts as a whole. Actions which originate on the “surface” of the soul, where the states are more sharply defined as they approach space, are determined and even automatic. So it is misleading to approach the question of freedom by an analysis of ordinary actions, which usually are determined or automatic. “It is at the great and solemn crisis, decisive of our reputation with others, and yet more with ourselves, that we choose in defiance of what is conventionally called a motive; and this absence of any tangible reason is the more striking the deeper our freedom goes” (“Time and Free Will,” p. 170).

It is clear that under the whole argument lies Bergson’s conception of “durée réelle,” that organization and interpenetration of psychic process which delivers it from the rigour of a logic which would split it into pieces, and then reason as if the pieces which it has manufactured were the original experience. The upshot is to emphasize the reality and the importance of those personal elements which belong to the individual experience, from which, as “merely subjective,” science has averted her eyes.

There remain, of course, many problems, and in particular the relation of soul and body, which is the subject of “Matter and Memory.” Even those who think that in the work we have been discussing Bergson has unduly sharpened the antithesis of outer and inner, of space and duration, must acknowledge that this will not make the rest of his task easier.

In conclusion, let those who have not yet read Bergson begin without loss of time. They will make the acquaintance not only of a great philosopher, but of a great artist, and will understand that an outline such as this is perilously like an attempt to represent a statue of Praxiteles by straight lines.