CREATIVE EVOLUTION

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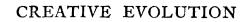
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TRANSLATOR'S NOTE

In the writing of this English translation of Professor Bergson's most important work, I was helped by the friendly interest of Professor William James, to whom I owe the illumination of much that was dark to me as well as the happy rendering of certain words and phrases for which an English equivalent was difficult to find. His sympathetic appreciation of Professor Bergson's thought is well known, and he has expressed his admiration for it in one of the chapters of A Pluralistic Universe. It was his intention, had he lived to see the completion of this translation, himself to introduce it to English readers in a prefatory note.

I wish to thank my friend, Dr. George Clarke Cox, for many valuable suggestions.

I have endeavoured to follow the text as closely as possible, and at the same time to preserve the living union of diction and thought. Professor Bergson has himself carefully revised the whole work. We both of us wish to acknowledge the great assistance of Miss Millicent Murby. She has kindly studied the translation phrase by phrase, weighing each word, and her revision has resulted in many improvements.

But above all we must express our acknowledgment

to Mr. H. Wildon Carr, the Honorary Secretary of the Aristotelian Society of London, and the writer of several studies of "Évolution Créatrice." We asked him to be kind enough to revise the proofs of our work. He has done much more than revise them: they have come from his hands with his personal mark in many places. We cannot express all that the present work owes to him.

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1 Proceedings of the Aristotelian Society, vols. ix. and x., and Hibbert Journal for July 1910.

INTRODUCTION

THE history of the evolution of life, incomplete as it yet is, already reveals to us how the intellect has been formed, by an uninterrupted progress, along a line which ascends through the vertebrate series up to man. shows us in the faculty of understanding an appendage of the faculty of acting, a more and more precise, more and more complex and supple adaptation of the consciousness of living beings to the conditions of existence that are made for them. Hence should result this consequence that our intellect, in the narrow sense of the word, is intended to secure the perfect fitting of our body to its environment, to represent the relations of external things among themselves-in short, to think matter. Such will indeed be one of the conclusions of the present essay. We shall see that the human intellect feels at home among inanimate objects, more especially among solids, where our action finds its fulcrum and our industry its tools; that our concepts have been formed on the model of solids; that our logic is, pre-eminently, the logic of solids; that, consequently, our intellect triumphs in geometry, wherein is revealed the kinship of logical thought with unorganized matter, and where the intellect has only to follow its natural movement, after the lightest possible contact with experience, in order to go from

discovery to discovery, sure that experience is following behind it and will justify it invariably.

But from this it must also follow that our thought, in its purely logical form, is incapable of presenting the true nature of life, the full meaning of the evolutionary movement. Created by life, in definite circumstances, to act on definite things, how can it embrace life, of which it is only an emanation or an aspect? Deposited by the evolutionary movement in the course of its way, how can it be applied to the evolutionary movement itself? As well contend that the part is equal to the whole, that the effect can reabsorb its cause, or that the pebble left on the beach displays the form of the wave that brought it there. In fact, we do indeed feel that not one of the categories of our thought-unity, multiplicity, mechanical causality, intelligent finality, etc.—applies exactly to the things of life: who can say where individuality begins and ends, whether the living being is one or many, whether it is the cells which associate themselves into the organism or the organism which dissociates itself into cells? In vain we force the living into this or that one of our moulds. All the moulds crack. They are too narrow, above all too rigid, for what we try to put into them. Our reasoning, so sure of itself among things inert, feels ill at ease on this new ground. would be difficult to cite a biological discovery due to pure reasoning. And most often, when experience has finally shown us how life goes to work to obtain a certain result, we find its way of working is just that of which we should never have thought.

Yet evolutionist philosophy does not hesitate to extend to the things of life the same methods of explanation which have succeeded in the case of un-

organized matter. It begins by showing us in the intellect a local effect of evolution, a flame, perhaps accidental, which lights up the coming and going of living beings in the narrow passage open to their action; and lo! forgetting what it has just told us, it makes of this lantern glimmering in a tunnel a Sun which can illuminate the world. Boldly it proceeds, with the powers of conceptual thought alone, to the ideal reconstruction of all things, even of life. True, it hurtles in its course against such formidable difficulties, it sees its logic end in such strange contradictions, that it very speedily renounces its first ambition. "It is no longer reality itself," it says, "that it will reconstruct, but only an imitation of the real, or rather a symbolical image; the essence of things escapes us, and will escape us always; we move among relations; the absolute is not in our province; we are brought to a stand before the Unknowable."—But for the human intellect, after too much pride, this is really an excess of humility. If the intellectual form of the living being has been gradually modelled on the reciprocal actions and reactions of certain bodies and their material environment, how should it not reveal to us something of the very essence of which these bodies are made? Action cannot move in the unreal. A mind born to speculate or to dream, I admit, might remain outside reality, might deform or transform the real, perhaps even create it,—as we create the figures of men and animals that our imagination cuts out of the passing cloud. But an intellect bent upon the act to be performed and the reaction to follow, feeling its object so as to get its mobile impression at every instant, is an intellect that touches something of the absolute. Would the idea ever have occurred to us to doubt

this absolute value of our knowledge if philosophy had not shown us what contradictions our speculation meets, what dead-locks it ends in? But these difficulties and contradictions all arise from trying to apply the usual forms of our thought to objects with which our industry has nothing to do, and for which, therefore, our moulds are not made. Intellectual knowledge, in so far as it relates to a certain aspect of inert matter, ought, on the contrary, to give us a faithful imprint of it, having been stereotyped on this particular object. It becomes relative only if it claims, such as it is, to present to us life—that is to say, the maker of the stereotype-plate.

Must we then give up fathoming the depths of life? Must we keep to that mechanistic idea of it which the understanding will always give us—an idea necessarily artificial and symbolical, since it makes the total activity of life shrink to the form of a certain human activity which is only a partial and local manifestation of life, a result or by-product of the vital process? We should have to do so, indeed, if life had employed all the psychical potentialities it possesses in producing pure understandings-that is to say, in making geometricians. But the line of evolution that ends in man is not the only one. On other paths, divergent from it, other forms of consciousness have been developed, which have not been able to free themselves from external constraints or to regain control over themselves, as the human intellect has done, but which, none the less, also express something that is immanent and essential in the evolutionary movement. Suppose these other forms of consciousness brought together and amalgamated with intellect: would not the result be a

consciousness as wide as life? And such a consciousness, turning around suddenly against the push of life which it feels behind, would have a vision of life complete—would it not?—even though the vision were fleeting.

It will be said that, even so, we do not transcend our intellect, for it is still with our intellect, and through our intellect, that we see the other forms of consciousness. And this would be right if we were pure intellects, if there did not remain, around our conceptual and logical thought, a vague nebulosity, made of the very substance out of which has been formed the luminous nucleus that we call the intellect. Therein reside certain powers that are complementary to the understanding, powers of which we have only an indistinct feeling when we remain shut up in ourselves, but which will become clear and distinct when they perceive themselves at work, so to speak, in the evolution of nature. They will thus learn what sort of effort they must make to be intensified and expanded in the very direction of life.

This amounts to saying that theory of knowledge and theory of life seem to us inseparable. A theory of life that is not accompanied by a criticism of knowledge is obliged to accept, as they stand, the concepts which the understanding puts at its disposal: it can but enclose the facts, willing or not, in pre-existing frames which it regards as ultimate. It thus obtains a symbolism which is convenient, perhaps even necessary to positive science, but not a direct vision of its object. On the other hand, a theory of knowledge which does not replace the intellect in the general evolution of life will teach us neither how the frames

of knowledge have been constructed nor how we can enlarge or go beyond them. It is necessary that these two inquiries, theory of knowledge and theory of life, should join each other, and, by a circular process, push each other on unceasingly.

Together, they may solve by a method more sure, brought nearer to experience, the great problems that philosophy poses. For, if they should succeed in their common enterprise, they would show us the formation of the intellect, and thereby the genesis of that matter of which our intellect traces the general configuration. They would dig to the very root of nature and of mind. They would substitute for the false evolutionism of Spencer—which consists in cutting up present reality, already evolved, into little bits no less evolved, and then recomposing it with these fragments, thus positing in advance everything that is to be explained—a true evolutionism, in which reality would be followed in its generation and its growth.

But a philosophy of this kind will not be made in a day. Unlike the philosophical systems properly so called, each of which was the individual work of a man of genius and sprang up as a whole, to be taken or left, it will only be built up by the collective and progressive effort of many thinkers, of many observers also, completing, correcting and improving one another. So the present essay does not aim at resolving at once the greatest problems. It simply desires to define the method and to permit a glimpse, on some essential points, of the possibility of its application.

Its plan is traced by the subject itself. In the first chapter, we try on the evolutionary progress the two ready-made garments that our understanding

puts at our disposal, mechanism and finality; 1 we show that they do not fit, neither the one nor the other, but that one of them might be recut and resewn, and in this new form fit less badly than the other. In order to transcend the point of view of the understanding, we try, in our second chapter, to reconstruct the main lines of evolution along which life has travelled by the side of that which has led to the human intellect. The intellect is thus brought back to its generating cause, which we then have to grasp in itself and follow in its movement. It is an effort of this kind that we attempt—incompletely indeed—in our third chapter. A fourth and last part is meant to show how our understanding itself, by submitting to a certain discipline, might prepare a philosophy which transcends it. For that, a glance over the history of systems became necessary, together with an analysis of the two great illusions to which, as soon as it speculates on reality in general, the human understanding is exposed.

¹ The idea of regarding life as transcending teleology as well as mechanism is far from being a new idea. Notably in three articles by Ch. Dunan on "Le Problème de la vie" (Revue philosophique, 1892) it is profoundly treated. In the development of this idea, we agree with Ch. Dunan on more than one point. But the views we are presenting on this matter, as on the questions attaching to it, are those that we expressed long ago in our Essai sur les données immédiates de la conscience (Paris, 1889). One of the principal objects of that essay was, in fact, to show that the psychical life is neither unity nor multiplicity, that it transcends both the mechanical and the intellectual, mechanism and finalism having meaning only where there is "distinct multiplicity," "spatiality," and consequently assemblage of pre-existing parts: "real duration" signifies both undivided continuity and creation. In the present work we apply these same ideas to life in general, regarded, moreover, itself from the psychological point of view.

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CHAPTER 1

THE EVOLUTION OF LIFE-MECHANISM AND TELEOLOGY

THE existence of which we are most assured and which we know best is unquestionably our own, for of every other object we have notions which may be considered external and superficial, whereas, of ourselves, our perception is internal and profound. What, then, do we find? In this privileged case, what is the precise meaning of the word "exist"? Let us recall here briefly the conclusions of an earlier work.

I find, first of all, that I pass from state to state. I am warm or cold, I am merry or sad, I work or I de 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. But this is not saying enough. Change is far more radical than we are at first inclined to suppose.

For I speak of each of my states as if it formed a block and were a separate whole. I say indeed that I change, but the change seems to me to reside in the passage from one state to the next: of each state, taken separately, I am apt to think that it remains the same during all the time that it prevails. Nevertheless, a slight effort of attention would reveal to me that there

5

is no feeling, no idea, no volition which is not undergoing change every moment: if a mental state ceased to vary, its duration would cease to flow. Let us take the most stable of internal states, the visual perception of a motionless external object. The object may remain the same. I may look at it from the same side, at the same angle, in the same light; nevertheless the vision I now have of it differs from that which I have just had, even if only because the one is an instant older than the other. My memory is there, which conveys something of the past into the present. My mental state, as it advances on the road of time, is continually swelling with the duration which it accumulates: it goes on increasing-rolling upon itself, as a snowball on the snow. Still more is this the case with states more deeply internal, such as sensations, feelings, desires, etc., which do not correspond, like a simple visual perception, to an unvarying external object. But it is expedient to disregard this uninterrupted change, and to notice it only when it becomes sufficient to impress a new attitude on the body, a new direction on the attention. Then, and then only, we find that our state has changed. The truth is that we change without ceasing, and that the state itself is nothing but change.

This amounts to saying that there is no essential difference between passing from one state to another and persisting in the same state. If the state which "remains the same" is more varied than we think, on the other hand the passing from one state to another resembles, more than we imagine, a single state being prolonged; the transition is continuous. But, just because we close our eyes to the unceasing variation of every psychical state, we are obliged, when the