



THE
Creative Mind

AN INTRODUCTION TO METAPHYSICS

Henri Bergson

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HENRI BERGSON

Translated by
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DOVER PUBLICATIONS, INC.
Mineola, New York

Bibliographical Note

This Dover edition, first published in 2007, is a reset, unabridged republication of the work published by The Philosophical Library, New York, in 1946.

Library of Congress Cataloging-in-Publication Data

Bergson, Henri, 1859–1941.

[*Pensée et le mouvant*. English]

The creative mind : an introduction to metaphysics / Henri Bergson ; translated by Mabelle L. Andison.

p. cm.

Originally published: New York : Philosophical Library, 1946.

ISBN 0-486-45439-8 (pbk.)

1. Philosophy. 2. Metaphysics. 3. Bernard, Claude, 1813–1878.
4. James, William, 1842–1910. 5. Ravaisson, Félix, 1813–1900. I. Title.

B2430.B4P362 2007

110—dc22

2006052121

Manufactured in the United States of America
Dover Publications, Inc., 31 East 2nd Street, Mineola, N.Y. 11501

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INTRODUCTION

I

Growth of Truth. Retrograde Movement of the True

What philosophy has lacked most of all is precision. Philosophical systems are not cut to the measure of the reality in which we live; they are too wide for reality. Examine any one of them, chosen as you see fit, and you will see that it could apply equally well to a world in which neither plants nor animals have existence, only men, and in which men would quite possibly do without eating and drinking, where they would neither sleep nor dream nor let their minds wander; where, born decrepit, they would end as babes-in-arms; where energy would return up the slope of its dispersion; and where everything might just as easily go backwards and be upside down. The fact is that a self-contained (vrai) system is an assemblage of conceptions so abstract, and consequently so vast, that it might contain, aside from the real, all that is possible and even impossible. The only explanation we should accept as satisfactory is one which fits tightly to its object, with no space between them, no crevice in which any other explanation might equally well be lodged; one which fits the object only and to which alone the object lends itself. Scientific explanation can be of such a kind;

it involves absolute precision and complete or mounting evidence. Can one say as much for philosophical theories?

There was one doctrine, however, which seemed to me as a youth to be an exception, and that is probably why I was drawn to it. The philosophy of Spencer aimed at taking the impression of things and modelling itself on the facts in every detail. To be sure it still sought its basis in vague generalities, and I was quite conscious of the weak points in his *First Principles*. But these weaknesses seemed to me to be due to the author's insufficient preparation and his inability to grasp the significance of the "latest ideas" of mechanics; I should have liked to take up this part of his work, complete and consolidate it, and I set to work on this task to the best of my ability. That was what led me to consider the idea of Time; and there a surprise awaited me.

I was indeed very much struck to see how real time, which plays the leading part in any philosophy of evolution, eludes mathematical treatment. Its essence being to flow, not one of its parts is still there when another part comes along. Superposition of one part on another with measurement in view is therefore impossible, unimaginable, inconceivable. There is no doubt but that an element of convention enters into any measurement, and it is seldom that two magnitudes, considered equal, are directly superposable one upon the other. Even then, this superposition must be possible for one of their aspects or effects which preserves something of them: this effect, this aspect then, is what we measure. But in the case of time, the idea of superposition would imply absurdity, for any effect of duration which will be superposable upon itself and consequently measurable, will have as its essence non-duration. Ever since my university days I had been aware that duration is measured by the trajectory of a body in motion and that mathematical time is a line; but I had not yet observed that this operation contrasts radically with all other processes of measurement, for it is not carried out on an aspect or an effect representative of what one wishes to measure, but on something which excludes it. The line one measures is immobile, time is mobility. The line is made, it is complete; time is what is happening, and more than that, it is what causes everything to happen. The measuring of time never deals with duration as dura-

tion; what is counted is only a certain number of extremities of intervals, or *moments*, in short, virtual halts in time. To state that an incident will occur at the end of a certain time t , is simply to say that one will have counted, from now until then, a number t of simultaneities of a certain kind. In between these simultaneities anything you like may happen. Time could be enormously and even infinitely accelerated; nothing would be changed for the mathematician, for the physicist or for the astronomer. And yet the difference with regard to consciousness would be profound (I am speaking naturally of a consciousness which would not be integrated with intra-cerebral movement); the wait from one day to another, from one hour to the next would no longer cause it the same fatigue. Science cannot concern itself with this specific wait (or interval), and its exterior cause: even when it is dealing with time which is passing or which will pass, it treats it as though it had passed. This is, in fact, quite natural; the role of science is to foresee. It extracts and retains from the material world that which can be repeated and calculated, and consequently that which is not in a state of flow. Thus it does nothing but lean in the direction of common sense, which is a beginning of science: usually when we speak of time we think of the measurement of duration, and not of duration itself. But this duration which science eliminates, and which is so difficult to conceive and express, is what one feels and lives. Suppose we try to find out what it is?²—How would it appear to a consciousness which desired only to see it without measuring it, which would then grasp it without stopping it, which, in short, would take itself as object, and which, spectator and actor alike, at once spontaneous and reflective, would bring ever closer together—to the point where they would coincide,—the attention which is fixed, and time which passes?

Such was the question; and through it I delved deep into the domain of the inner life, which until then had held no interest for me. I very quickly spotted the inadequacy of the associationist conception of the mind; this conception, then common to most psychologists and philosophers, was the result of an artificial re-grouping of conscious life. What would direct vision give,—immediate vision, with no interposed prejudices?³ A long series of reflections and analyses made me brush aside one prej-

udice after another, and abandon many ideas I had accepted without question; finally, I believed I had found pure, unadulterated inner continuity (duration), continuity which was neither unity nor multiplicity, and which did not fit into any of our categories of thought (*cadres*). That positive science had not been concerned with this duration was, I thought, quite natural: its function after all is to compose a world for us in which we can, for the convenience of action, ignore the effects of time. But how had Spencer's philosophy, a doctrine of evolution constructed to follow reality in its mobility, its progress, its inner maturing, been able to close its eyes to what is change itself?

This question was later to lead me to tackle once again the problem of the evolution of life, taking real time into account; I was to find then that Spencerian "evolutionism" had to be almost completely recast. For the moment, I was absorbed by the vision of duration. In reviewing the different systems, I noticed that philosophers had paid almost no attention to it. All through the history of philosophy time and space have been placed on the same level and treated as things of a kind; the procedure has been to study space, to determine its nature and function, and then to apply to time the conclusions thus reached. The theories of space and time thus become counterparts of one another. To pass from one to the other one had only to change a single word: "juxtaposition" was replaced by "succession." Real duration was systematically avoided. Why? Science has its own reasons for avoiding it, but metaphysics, which preceded science, was already doing so without having the same excuses. As I examined the various doctrines it struck me that language was largely responsible for this confusion; duration is always expressed in terms of extension; the terms which designate time are borrowed from the language of space. When we evoke time, it is space which answers our call. Metaphysics must have conformed to the habits of language, which in turn are governed by the habits of common sense.

But if science and common sense are in agreement on this point, if the intelligence, either spontaneous or reflective, rules out real time, might it not be because the goal of our understanding demands it? That is what I thought I observed in studying the structure of the human understanding. It seemed to me

that one of its functions was precisely to mask duration, either in movement or in change.

If it is a question of movement, all the intelligence retains is a series of positions: first one point reached, then another, then still another. But should something happen between these points, immediately the understanding intercalates new positions, and so on indefinitely. It refuses to consider *transition*; if we insist, it so manages that mobility, pushed back into more and more narrow intervals as the number of considered positions increases—recedes, withdraws and finally disappears into the infinitely small. This is perfectly natural, if the intellect is destined first of all to prepare and bear upon our action on things. Our action exerts itself conveniently only on fixed points; fixity is therefore what our intelligence seeks; it asks itself where the mobile is to be found, where it will be, where it will *pass*. Even if it takes note of the moment of passing, even if it seems then to be concerned with duration, it restricts itself in that direction to verifying the simultaneity of two virtual halts: the halt of the mobility it is considering and the halt of another mobile whose course is presumed to be that of time. But it is always with immobilities, real or possible, that it seeks to deal. Suppose we skip this intellectual representation of movement, which shows it as a series of positions. Let us go directly to movement and examine it without any interposed concept: we shall find it simple and all-of-a-piece. Let us go further; suppose we get it to coincide with one of those incontestably real and absolute movements which we ourselves produce. This time we have mobility in its essence, and we feel that it mingles with an effort whose duration is an indivisible continuity. But as a certain space will have been crossed, our intelligence, which seeks fixity everywhere, assumes after the event that movement has been *exactly fitted on* to this space (as though it, movement, could coincide with immobility!) and that the mobile *exists* in turn in each of the points of the line it is moving along. At most we can say that it would have been at one of these particular points if it had stopped sooner,—if, in view of a shorter movement we had made an entirely different effort. It is only a step from there to seeing in movement just a series of positions; the duration of movement will then break up into “moments” corresponding to

each of the positions. But the moments of time and the positions of the mobile are only snapshots which our understanding has taken of the continuity of movement and duration. In these juxtaposed views one has a practical substitute for time and movement which conforms to the exigencies of language until such time as language lends itself to the exigencies of computation; but one has only an artificial means of recomposing: time and movement are something else.¹

We shall say as much for change; the understanding breaks it up into successive and distinct states, supposed to be invariable. If one looks a little more closely at each of these states, noticing that it varies, asking how it could endure if it did not change, the understanding hastens to replace it by a series of shorter states, which in their turn break up if necessary, and so forth ad infinitum. But how can we help seeing that the essence of duration is to flow, and that the fixed placed side by side with the fixed will never constitute anything which has duration. It is not the "states," simple snapshots we have taken once again along the course of change, that are real; on the contrary, it is flux, the continuity of transition, it is change itself that is real. This change is indivisible, it is even substantial. If our intelligence insists on judging it to be insubstantial, to give it some vague kind of support, it is because it has replaced this change by a series of adjacent states; but this multiplicity is artificial as is also the unity one endows it with. What we have here is merely an uninterrupted thrust of change—of a change always adhering to itself in a duration which extends indefinitely.

These reflections engendered many doubts as well as great hopes in my mind. I told myself that metaphysical problems had perhaps been badly propounded, but that precisely for that reason it was no longer advisable to believe them "eternal," that is, insoluble. Metaphysics dates from the day when Zeno of Elea pointed out the inherent contradictions of movement and change, as our intellect represents them. To surmount these difficulties raised by the intellectual representation of movement and change, to get around them by an increasingly subtle intellectual labour, required the principal effort of ancient and modern

philosophers. It is thus that metaphysics was led to seek the reality of things above time, beyond what moves and what changes, and consequently outside what our senses and consciousness perceive. As a result it could be nothing but a more or less artificial arrangement of concepts, a hypothetical construction. It claimed to go beyond experience; what it did in reality was merely to take a full and mobile experience, lending itself to a probing ever-deepening and as a result pregnant with revelations—and to substitute for it a fixed extract, desiccated and empty, a system of abstract general ideas, drawn from that very experience or rather from its most superficial strata. One might as well discourse on the subject of the cocoon from which the butterfly is to emerge, and claim that the fluttering, changing, living butterfly finds its *raison d'être* and fulfillment in the immutability of its shell. On the contrary, let us unfasten the cocoon, awaken the chrysalis; let us restore to movement its mobility, to change its fluidity, to time its duration. Who knows but what the “great insoluble problems” will remain attached to the outer shell? They were not concerned with either movement or change or time, but solely with the conceptual cocoon which we mistakenly took for them or for their equivalent. Metaphysics will then become experience itself; and duration will be revealed as it really is,—unceasing creation, the uninterrupted up-surge of novelty.

For that is what our habitual representation of movement and change hinders us from seeing. If movement is a series of positions and change a series of states, time is made up of distinct parts immediately adjacent to one another. No doubt we still say that they follow one another, but in that case this succession is similar to that of the images on a cinematographic film: the film could be run off ten, a hundred, even a thousand times faster without the slightest modification in what was being shown; if its speed were increased to infinity, if the unrolling (this time, away from the apparatus) became instantaneous, the pictures would still be the same. Succession thus understood, therefore, adds nothing; on the contrary, it takes something away; it marks a deficit; it reveals a weakness in our perception, which is forced by this weakness to divide up the film image by image instead of grasping it in the aggregate. In short, time thus considered is no

more than a space in idea where one imagines to be set out in line all past, present and future events, and in addition, something which prevents them from appearing in a single perception: the unrolling in duration would be this very incompleteness, the addition of a negative quantity. Such, consciously or unconsciously, is the thought of most philosophers, in accordance with the demands of the understanding, the necessities of language and the symbolism of science. *Not one of them has sought positive attributes in time.* They treat succession as a co-existence which has failed to be achieved, and duration as a non-eternity. That is why, in spite of all their efforts, they cannot succeed in conceiving the radically new and unforeseeable. I speak not only of those philosophers who believe in so rigorous a concatenation of phenomena and events that effects must be deduced from causes: such philosophers imagine that the future is given in the present, that it is theoretically visible in it, that to the present it will add nothing new. But even those few who have believed in free will, have reduced it to a simple "choice" between two or more alternatives, as if these alternatives were "possibles" outlined beforehand, and as if the will was limited to "bringing about" ("realiser") one of them. They therefore still admit even if they do not realize it, that everything is given. They seem to have no idea whatever of an act which might be entirely new (at least inwardly) and which in no way would exist, not even in the form of the purely possible, prior to its realization. But this is the very nature of a free act. To perceive it thus, as indeed we must do with any creation, novelty or unpredictable occurrence whatsoever, we have to get back into pure duration.

Try, for instance, to call up today the act you will accomplish tomorrow, even if you know what you are going to do. Your imagination perhaps evokes the movement to be gone through; but what you will think and feel in doing it you can know nothing of today, because your state tomorrow will include all the life you will have lived up until that moment, with whatever that particular moment is to add to it. To fill this state in advance with what it should contain you will need exactly the time which separates today from tomorrow, for you cannot shorten psychological life by a single instant without modifying its content. Can

you shorten the length of a melody without altering its nature? The inner life is that very melody. In supposing therefore that you know what you will be doing tomorrow you foresee only the external shape of your action; any effort to imagine its interior beforehand will fill up a duration which, from one lengthening to another, will lead you to the moment when the action is accomplished and when there can no longer be any question of foreseeing it. What will it be, if action is truly free—that is to say, created whole—in its outer design as well as in its inner colouring, at the moment it is accomplished?

Radical indeed is the difference between an evolution whose continuous phases penetrate one another by a kind of internal growth, and an unfurling whose distinct parts are placed in juxtaposition to one another. The fan one spreads out might be opened with increasing rapidity, and even instantaneously; it would still display the same embroidery, prefigured on the silk. But a real evolution, if ever it is accelerated or retarded, is entirely modified within; its acceleration or retardation is precisely that internal modification. Its content and its duration are one and the same thing.

It is true that alongside the states of consciousness which live this unshrinkable and inextensible duration, there are material systems which time merely glides over. Of the phenomena which follow from them one can really say that they are the unfurling of a fan, or better still, the unrolling of a cinematographic film. Calculable ahead of time, they existed prior to their realization in the form of possibles.

Such are the systems studied by astronomy, physics and chemistry. Does the material universe in its entirety form a system of this kind? When our science assumes this, it simply means by so doing to discard everything in the universe which is not calculable. But the philosopher who does not want to discard anything is really obliged to ascertain that the states of our material world are contemporaneous with the history of our consciousness. As the latter endures the former must be bound in some way to real duration. In theory, the film upon which the successive states of a wholly calculable system are pictured could be run off at any speed at all without changing a thing on

it. In fact, this speed is fixed, since the unrolling of the film corresponds to a certain duration of our inner life—to that one and to no other. The film which is unrolling is therefore in all probability attached to consciousness which has duration and which regulates its movement. As we have said, when one wishes to prepare a glass of sugared water one is obliged to wait until the sugar melts. This necessity for waiting is the significant fact. It shows that if one can cut out from the universe the systems for which time is only an abstraction, a relation, a number, the universe itself becomes something different. If we could grasp it in its entirety, inorganic but interwoven with organic beings, we should see it ceaselessly taking on forms as new, as original, as unforeseeable as our states of consciousness.

But we have so much trouble in distinguishing between an evolution and an unfurling, between the radically new and a rearrangement of the pre-existing, in fact, between creation and simple choice, that this distinction cannot be clarified in too many directions at once. Let us say then, that in duration, considered as a creative evolution, there is perpetual creation of possibility and not only of reality. Many will be loathe to admit it, because they will always believe that an event could not be accomplished if it had not been possible of accomplishment: so that before being real it must have been possible. But look at it closely: you will see that “possibility” signifies two entirely different things and that most of the time we waver between them, involuntarily playing upon the meaning of the word. When a musician composes a symphony was his work possible before being real? Yes, if by this we mean that there was no insurmountable barrier to its realization. But from this completely negative sense of the word we pass, inadvertently, to a positive sense: we imagine that everything which occurs could have been foreseen by any sufficiently informed mind, and that, in the form of an idea, it was thus pre-existent to its realization; an absurd conception in the case of a work of art, for from the moment that the musician has the precise and complete idea of the symphony he means to compose, his symphony is done. Neither in the artist’s thought nor, what is more, in any other thought comparable to ours, whether impersonal or even simply virtual, did the symphony exist in its quality

of being possible before being real. But can we not say as much of any state of the universe whatsoever, taken with all conscious and living beings? Is it not richer in novelty, in the radical unforeseeable, than the symphony of even the greatest master?

Nevertheless the conviction still persists that even if it has not been conceived before being produced, *it could have been*, and in this sense from all eternity it has existed as possible, in some real or virtual intelligence. The examining of this illusion should tell us that it results from the very essence of our understanding. Things and events happen at certain moments; the judgment which determines the occurrence of the thing or the event can only come after them; it therefore has its date. But this date at once fades away, in virtue of the principle deep-rooted in our intellect, that all truth is eternal. If the judgment is true now, it seems to us it must always have been so. It matters not that it had never yet been formulated: it existed by right before existing in fact. To every true affirmation we attribute thus a retroactive effect; or rather, we impart to it a retrograde movement. As though a judgment could have pre-existed the terms which make it up! As though these terms did not date from the appearance of the objects they represent! As though the thing and the idea of the thing, its reality and its possibility, were not created at one stroke when a truly new form, invented by art or nature is concerned!

The consequences of this illusion are innumerable.² Our estimate of men and events is wholly impregnated with a belief in the retrospective value of true judgment, in a retrograde movement which truth, once posited, would automatically make in time. By the sole fact of being accomplished, reality casts its shadow behind it into the indefinitely distant past: it thus seems to have been pre-existent to its own realization, in the form of a possible. From this results an error which vitiates our conception of the past; from this arises our claim to anticipate the future on every occasion. We ask ourselves, for example, what the art, the literature, the civilization of tomorrow will be like; we picture approximately the graph of the evolution of societies; we go so far as to predict events in detail.

We can always, to be sure, link up the reality once it is accomplished, to the events which preceded it and to the circumstances in which it occurred; but taken from another angle, an

entirely different reality (not just *any* reality, it is true) could just as well be linked up to the same circumstances and events. Are we to say then that by considering *all* sides of the present, extending it in every direction, we, now, should obtain all the possibles from which the future will choose, supposing it to have a choice? But in the first place these prolongations themselves might be additions of new qualities, created from nothing and, as such, absolutely unforeseeable and in the second place, a "side" of the present exists as a "side" only when our attention has isolated it, thus cutting a certain form out of the totality of present circumstances. How then could "all the sides" of the present exist before subsequent events have determined what forms the cuttings operated by, our attention may have? These sides, it would seem, belong only in retrospect to a former present, that is to say to the past, and they possessed no more reality in that present, when it was a present, than the symphonies of future musicians have reality in our own actual present. To take a simple example, nothing prevents us today from associating the romanticism of the nineteenth century with what was already romantic in the classical writers. But the romantic aspect of classicism is only brought by the retroactive effect of romanticism once it has appeared. If there had not been a Rousseau, a Chateaubriand, a Vigny, a Victor Hugo, not only should we never have perceived, but also *there would never really have existed*, any romanticism in the earlier classical writers, for this romanticism of theirs only materialises by lifting out of their work a certain aspect, and this slice (*découpage*), with its particular form, no more existed in classical literature before romanticism appeared on the scene than there exists, in the cloud floating by, the amusing design that an artist perceives in shaping to his fancy the amorphous mass. Romanticism worked retroactively on classicism as the artist's design worked on the cloud. Retroactively it created its own prefiguration in the past and an explanation of itself by its predecessors.

This amounts to saying that it is only by a lucky accident, or exceptional good fortune that we can accurately note in the present reality what will be of most interest for the future historian. When that historian studies our present he will be seeking

in particular the explanation of his present, and more especially of what is new in his present. We today can have no idea whatsoever of this novelty, if it is to be a creation; how then could we be guided by it in choosing from among the facts those we are to register, or rather in fabricating facts by arranging the present reality in the light of it? The essential fact of modern times is the advent of democracy. It is incontestably true that in the past, as described by its contemporaries, we find the shadows of coming events; but those indications which are perhaps most interesting would have been noted then only had they known that humanity was moving in that direction; now the trend of that movement was at that time no more marked than any other, or rather it did not yet exist, since it was created by the movement itself,—that is, by the forward march of the men who have progressively conceived and realised democracy. The premonitory signs are therefore, in our eyes, signs only because we now know the course, because the course has been completed. Neither the course, nor its direction, nor in consequence, its end were given when these facts came into being; hence they were not yet signs. Let us go still further. We were saying that the most important facts in this connection could have been neglected by contemporaries. But the truth is that most of these facts did not yet exist as facts at that time; they would exist retrospectively for us if we could now resuscitate the period in its entirety, and play the particular form of searchlight we call the democratic idea over the solid block of reality as it was then: the portions thus illuminated, thus brought into relief from the whole, with contours as original and unforeseeable as the design of a great master, would be the preparatory facts of democracy. In short, in order to bequeath to our descendants the explanation, by its antecedents, of the essential event of their time, that event would already have to take shape before our eyes, and there would have to be no real duration. We transmit to future generations what interests us, what our attention centers upon and even sketches, in the light of our past evolution, but not what the future will have made interesting to them by the creation of a new interest, by a new direction communicated to their attention. In other words then, the historical origins of the present in

its most important aspect, cannot be completely elucidated, for they would only be restored in their completeness if it had been possible for the past to be expressed by its contemporaries in terms of an indeterminate and therefore unforeseeable future.

Let us take a colour such as orange.³ As we also know red and yellow, we can consider orange as yellow in one sense, red in another, and say that it is composed of yellow and red. But suppose that, orange being what it is, neither yellow nor red had yet appeared in the world: would orange still be composed of those two colours? Obviously not. The sensation of red and the sensation of yellow, involving as they do a whole nervous and cerebral mechanism at the same time as certain special dispositions of consciousness, are creations of life which have happened, but which could have not happened; and if there had never been, either on our planet or any other, beings undergoing these two sensations, the sensation of orange would have been a simple sensation; never would the sensations of yellow and red have figured in it either as components or as aspects. I realize that our habitual logic protests. It says: "If the sensations of yellow and red enter into the composition of the sensation of orange today, they entered into it always, even though there was a time when neither one of them existed effectively: they were there virtually." But that is because our ordinary logic is a logic of retrospection. It cannot help throwing present realities, reduced to possibilities or virtualities, back into the past, so that what is compounded now must, in its eyes, always have been so. It does not admit that a simple state can, in remaining what it is, become a compound state solely because evolution will have created new viewpoints from which to consider it, and by so doing, created multiple elements in which to analyze it ideally. Our logic will not believe that if these elements had sprung forth as realities they would not have existed before that as possibilities, the possibility of a thing never being (except where that thing is a purely mechanical arrangement of pre-existing elements) more than the mirage, in the indefinite past, of reality that has come into being. If this logic we are accustomed to pushes the reality that springs forth in the present back into the past in the form of a possible, it is precisely because it will not

admit that anything does spring up, that something is created and that time is efficacious. It sees in a new form or quality only a rearrangement of the old—nothing absolutely new. For it, all multiplicity resolves itself into a definite number of unities. It does not accept the idea of an indistinct and even undivided multiplicity, purely intensive or qualitative, which, while remaining what it is, will comprise an indefinitely increasing number of elements, as the new points of view for considering it appear in the world. To be sure, it is not a question of giving up that logic or of revolting against it. But we must extend it, make it more supple, adapt it to a duration in which novelty is constantly springing forth and evolution is creative.

Such was the chosen course upon which I embarked. Many others opened up before me and around me from the centre in which I had put myself in order to recapture pure duration. But I kept to that one because I had chosen first of all to try out my method on the problem of liberty. In so doing I should be getting back into the flow of the inner life, of which philosophy seemed to me too often to retain only the hardened outer shell. Had not the novelist and moralist advanced farther in that direction than the philosopher? Perhaps; but it was only here and there, under the pressure of necessity, that they had broken through the barrier; no one had as yet bethought himself of setting out methodically “in search of time gone by” (“à la recherche du temps perdu”). Be that as it may, I gave only some bits of information on this subject in my first book and still restricted myself to certain allusions in the second, when I compared the plane of action—wherein the past is contracted into the present—with the dream plane, where, indivisible and indestructible, the whole of the past is deployed. But if it is the province of literature to undertake in this way the study of the soul in the concrete, upon individual examples, the duty of philosophy it seemed to me was to lay down the general conditions of the direct, immediate observation of oneself by oneself. This inner observation is warped by habits we have developed; the chief example of this warping is doubtless the one which created the problem of liberty—a pseudo-problem born of a confusion of

duration with extension. But there are other pseudo-problems which seemed to have the same origin: our moods appear to us as though they could be separated, counted so to speak; certain of them, thus dissociated, have as it were an intensity which is measurable; for each and every one of these states we think we can substitute the words which designate them and which ever after will cover them up; we then attribute to them the fixity, the discontinuity, the generality of the words themselves.

It is this covering that we must grasp in order to tear it off. But we shall grasp it only if we consider first its aspect and its structure, if, in addition, we understand its intended purpose. It is spatial by nature and has a social utility. Spatiality therefore, and in this quite special sense, sociability, are in this case the real causes of the relativity of our knowledge. Brushing aside this veil, we get back to the immediate and reach an absolute.

From these early reflections came conclusions which fortunately have become almost commonplace, but which, at the time, appeared daring. They required that psychology break with associationism, which was universally accepted, if not as a doctrine, at least as a method. They demanded still another break which at that time I only half saw. Beside associationism there was Kantianism, whose influence, often combined with that of the former, was no less powerful and wide-spread. Those who repudiated the positivism of a Comte, or the agnosticism of a Spencer dared not go so far as to question the Kantian conception of the relativity of knowledge. Kant had proved, so it was said, that our thought exerts itself upon a matter previously scattered in Space and Time, and thus prepared especially for man: the "thing in itself" escapes us; to comprehend it, we would need an intuitive faculty which we do not possess. On the contrary, from my analysis the result was that at least a part of reality, our person, can be grasped in its natural purity. Here, at any rate, the materials of our knowledge have not been created, or ground out of shape and reduced to powder, by some malicious genius who has afterwards thrown into some artificial receptacle such as our consciousness, a psychological dust. Our person appears to us just as it is "in itself," as soon as we free ourselves of the habits contracted for our greater convenience. But might it not be the same for other realities, perhaps even for all of

them? Was the "relativity of consciousness," which arrested the soaring of metaphysics, original and essential? Or rather, might it not be accidental and acquired? Would it not simply be due to the fact that the intelligence has contracted habits necessary for everyday living; these habits, transferred to the domain of speculation, bring us face to face with a reality, distorted or made over, or at any rate, arranged; but the arrangement does not force itself upon us irresistably; it comes from ourselves; what we have done we can undo; and we enter then into direct contact with reality. It was therefore not only a psychological theory, associationism, which I brushed aside; it was also and for a similar reason, a general philosophy such as Kantianism, and everything connected with it. Both of them, almost universally accepted at that time in their main outlines, appeared to me as *impedimenta* hindering philosophy and psychology from going ahead.

The only thing to do, then, was to go ahead. It was not enough to brush aside the obstacle. As a matter of fact, I undertook the study of psychological functions, then of psycho-physiological relation, then of life in general, always seeking direct vision, and in this way suppressing problems which did not concern the things themselves, but their translation into artificial concepts. I shall not stop here to go into something which would only show the extreme complication of a method to all appearance so simple; I shall speak of it again very briefly, in the next chapter. But since I began by saying that my primary concern was precision, let me end by pointing out that precision could not have been obtained, as I see it, by any other method. For lack of precision is commonly the including of a thing in too wide a genus, things and genera corresponding moreover to pre-existing words. But if one begins by casting off ready-made concepts, if one professes to have a direct vision of reality, if one sub-divides this reality taking into account its articulations, the new concepts one must form in order to express oneself will now be cut to the exact measure of the object; lack of precision will arise only from the extension of these concepts to other objects which they would include equally in their generality, but which will have to be studied in themselves, outside of these concepts, when one wishes to know them in their turn.

INTRODUCTION

II

Stating of the Problems

Duration and intuition.—Nature of intuitive knowledge.—In what sense it is clear.—Two kinds of clarity.—The Intelligence.—Value of intellectual knowledge.—Abstractions and metaphors.—Metaphysics and science.—Under what condition they can be mutually helpful.—On mysticism.—On the independence of the mind.—Must we accept the “terms” of the problems?—The philosophy of the body politic.—General ideas.—True and false problems.—Kantian criticism and the theories of knowledge.—The “intellectualist” illusion.—Methods of teaching.—*Homo loquax*.—The philosopher, the scholar and the “intelligent man.”

These conclusions on the subject of duration were, as it seemed to me, decisive. Step by step they led me to raise intuition to the level of a philosophical method. “Intuition,” however, is a word whose use caused me some degree of hesitation. Of all the terms which designate a mode of knowing, it is still the most appropriate; and yet it leads to a certain confusion. Because a Schelling, a Schopenhauer and others have already called upon intuition, because they have more or less set up intuition in opposition to intelligence, one might think that I was using the same method. But of course, their intuition was an immediate search for the eternal! Whereas, on the contrary, for me it was a question, above all, of finding true duration. Numerous are the

philosophers who have felt how powerless conceptual thought is to reach the core of the mind. Numerous, consequently, are those who have spoken of a supra-intellectual faculty of intuition. But as they believed that the intelligence worked within time, they have concluded that to go beyond the intelligence consisted in getting outside of time. They did not see that intellectualized time is space, that the intelligence works upon the phantom of duration, not on duration itself, that the elimination of time is the habitual, normal, commonplace act of our understanding, that the relativity of our knowledge of the mind is a direct result of this fact, and that hence, to pass from intellection to vision, from the relative to the absolute, is not a question of getting outside of time (we are already there); on the contrary, one must get back into duration and recapture reality in the very mobility which is its essence. An intuition, which claims to project itself with one bound into the eternal, limits itself to the intellectual. For the concepts which the intelligence furnishes, the intuition simply substitutes one single concept which includes them all and which consequently is always the same, by whatever name it is called: Substance, Ego, Idea, Will. Philosophy, thus understood, necessarily pantheistic, will have no difficulty in explaining everything deductively, since it will have been given beforehand, in a principle which is the concept of concepts, all the real and all the possible. But this explanation will be vague and hypothetical, this unity will be artificial, and this philosophy would apply equally well to a very different world from our own. How much more instructive would be a truly intuitive metaphysics, which would follow the undulations of the real! True, it would not embrace in a single sweep the totality of things; but for each thing it would give an explanation which would fit it exactly, and it alone. It would not begin by defining or describing the systematic unity of the world: who knows if the world is actually one? Experience alone can say, and unity, if it exists, will appear at the end of the search as a result; it is impossible to posit it at the start as a principle. Furthermore, it will be a rich, full unity, the unity of a continuity, the unity of our reality, and not that abstract and empty unity, which has come from one supreme generalization, and

which could just as well be that of any possible world whatsoever. It is true that philosophy then will demand a new effort for each new problem. No solution will be geometrically deduced from another. No important truth will be achieved by the prolongation of an already acquired truth. We shall have to give up crowding universal science potentially into one principle.

The intuition we refer to then bears above all upon internal duration. It grasps a succession which is not juxtaposition, a growth from within, the uninterrupted prolongation of the past into a present which is already blending into the future. It is the direct vision of the mind by the mind,—nothing intervening, no refraction through the prism, one of whose facets is space and another, language. Instead of states contiguous to states, which become words in juxtaposition to words, we have here the indivisible and therefore substantial continuity of the flow of the inner life. Intuition, then, signifies first of all consciousness, but immediate consciousness, a vision which is scarcely distinguishable from the object seen, a knowledge which is contact and even coincidence.—Next, it is consciousness extended, pressing upon the edge of an unconscious which gives way and which resists, which surrenders and which regains itself: through the rapid alternating of obscurity and light, it makes us see that the unconscious is there; contrary to strict logic, it affirms that the psychological can be consciousness as much as it likes, there is nevertheless a psychological unconsciousness.—Does it not go even further? Is it merely the intuition of ourselves? Between our consciousness and other consciousnesses the separation is less clear-cut than between our body and other bodies, for it is space which makes these divisions sharp. Unreflecting sympathy and antipathy, which so often have that power of divination, give evidence of a possible interpenetration of human consciousnesses. It would appear then that phenomena of psychological endosmosis exist. It may be that intuition opens the way for us into consciousness in general.—But is it only with consciousnesses that we are in sympathy? If every living being is born, develops and dies, if life is an evolution and if duration is in this case a reality, is there not also an intuition of the vital, and consequently a metaphysics of life, which might in a sense prolong

the science of the living? Science will certainly throw more and more light on the physico-chemical nature of organized matter, but the underlying cause of this organization, which we can easily see does not come within the realm either of pure mechanism or of finality (in the proper sense) and is neither pure unity nor distinct multiplicity, and which in fact our understanding will characterize by simple negations, this cause, shall we not get down to it by recapturing through consciousness the vital impetus within us?—Let us go still further. Above and beyond the organizing process, unorganized matter appears as though decomposable into systems over which time slips without penetrating, systems which belong to the realm of science and to which the understanding can be applied. But the material universe in its entirety *keeps* our consciousness *waiting*; it waits itself. Either it endures, or it is bound up in our own duration. Whether it is connected with the mind by its origins or by its function, in either case it has to do with intuition through all the real change and movement that it contains. It is my belief, in fact, that the idea of differential, or rather of fluxion, was suggested to science by a vision of this kind. Metaphysical in its origins, it became scientific as it grew more rigorous, that is, expressible in static terms. In short, pure change, real duration, is a thing spiritual or impregnated with spirituality. Intuition is what attains the spirit, duration, pure change. Its real domain being the spirit, it would seek to grasp in things, even material things, their participation in spirituality,—I should say in divinity were I not aware of all the human element still in our consciousness, however purified and spiritualized. This human element is precisely what makes it possible for the intuitional effort to be accomplished at different levels on different points, and to give in various philosophies results which do not coincide with one another even though they are in no way incompatible.

Let no one ask me for a simple and geometrical definition of intuition. It is only too easy to show that the word is taken in meanings which cannot be deduced mathematically from one another. An eminent Danish philosopher has pointed out four of them. I should be inclined to say that there are more!⁴ Of what is not abstract and conventional but real and concrete, and all the

more so of what is not reconstitutable with known components, in other words, of that thing which has not been cut out of the whole of reality either by the understanding or by common sense or by language, one cannot give any idea unless one takes views of it that are multiple, complementary and not at all equivalent. God forbid that I should compare the small with the great, my effort with that of the masters! But the variety of the functions and aspects of intuition, as I describe it, is nothing beside the multiplicity of meanings the words "essence" and "existence" have in Spinoza, or the terms "form," "power," "act" . . . etc., in Aristotle. Glance over the list of meanings of the word *eidos* in the *Index Aristotelicus*: you will see how much they differ. If one considers two sufficiently divergent meanings, they will almost seem to be mutually exclusive. They are not exclusive because the chain of intermediary meanings links them up. By making the necessary effort to embrace the whole, one perceives that one is in the real and not in the presence of a mathematical essence which could be summed up in a simple formula.

There is, however, a fundamental meaning: to think intuitively is to think in duration. Intelligence starts ordinarily from the immobile, and reconstructs movement as best it can with immobilities in juxtaposition. Intuition starts from movement, posits it, or rather perceives it as reality itself, and sees in immobility only an abstract moment, a snapshot taken by our mind, of a mobility. Intelligence ordinarily concerns itself with things, meaning by that, with the static, and makes of change an accident which is supposedly superadded. For intuition the essential is change: as for the thing, as intelligence understands it, it is a cutting which has been made out of the becoming and set up by our mind as a substitute for the whole. Thought ordinarily pictures to itself the new as a new arrangement of pre-existing elements; nothing is ever lost for it, nothing is ever created. Intuition, bound up to a duration which is growth, perceives in it an uninterrupted continuity of unforeseeable novelty; it sees, it knows that the mind draws from itself more than it has, that spirituality consists in just that, and that reality, impregnated with spirit, is creation. The habitual labor of thought is easy and can be prolonged at will. Intuition is arduous and cannot last.

Whether it be intellection or intuition, thought, of course, always utilizes language; and intuition, like all thought, finally becomes lodged in concepts such as duration, qualitative or heterogeneous multiplicity, unconsciousness,—even differentiation, if one considers the notion such as it was to begin with. But the concept which is of intellectual origin is immediately clear, at least for a mind which can put forth sufficient effort, while the idea which has sprung from an intuition ordinarily begins by being obscure, whatever our power of thought may be. The fact is that there are two kinds of clarity.

A new idea may be clear because it presents to us, simply arranged in a new order, elementary ideas which we already possessed. Our intelligence, finding only the old in the new, feels itself on familiar ground; it is at ease; it “understands.” Such is the clarity we desire, are looking for, and for which we are always most grateful to whoever presents it to us. There is another kind that we submit to, and which, moreover, imposes itself only with time. It is the clarity of the radically new and absolutely simple idea, which catches as it were an intuition. As we cannot reconstruct it with pre-existing elements, since it has no elements, and as on the other hand, to understand without effort consists in recomposing the new from what is old, our first impulse is to say it is incomprehensible. But let us accept it provisionally, let us go with it through the various departments of our knowledge: we shall see that, itself obscure, it dissipates obscurities. By it the problems we considered insoluble will resolve themselves, or rather, be dissolved, either to disappear definitively, or to present themselves in some other way. From what it has done for these problems, it will in its turn, benefit. Each one of them, intellectual by nature, will communicate to it something of its intellectuality. Thus intellectualized, this idea can be aimed anew at problems which will have been of use to it after having made use of it; better still, it will clear up the obscurity which surrounded them, and will, as a result, become itself still clearer. One must therefore distinguish between the ideas which keep their light for themselves, making it penetrate immediately into their slightest recesses, and those whose radiation is exterior, illuminating a whole region of thought. These

can begin by being inwardly obscure; but the light they project about them comes back in reflection, with deeper and deeper penetration; and they then have the double power of illuminating what they play upon and of being illuminated themselves.

Even then they must be given time. The philosopher has not always this patience. How much simpler it is to confine oneself to notions stored up in the language! These ideas were formed by the intelligence as its needs appeared. They correspond to a cutting out of reality according to the lines that must be followed in order to act conveniently upon it. Most frequently they distribute objects and facts according to the way they can be turned to account, throwing pell-mell into the same intellectual compartment everything which concerns the same need. When we react identically to different perceptions, we say that we are faced with objects "of the same kind." When we react in two directly opposed ways, we are dividing the objects into two "opposite kinds." What will be clear, then, by definition, is that which can be resolved into generalities thus obtained; obscure, that which can not be so reduced. Thus is explained the striking inferiority of the intuitive point of view in philosophical controversy. Listen to the discussion between any two philosophers one of whom upholds determinism, and the other liberty: it is always the determinist who seems to be in the right. He may be a beginner and his adversary a seasoned philosopher. He can plead his cause nonchalantly, while the other sweats blood for his. It will always be said of him that he is simple, clear and right. He is easily and naturally so, having only to collect thought ready to hand and phrases ready-made: science, language, common sense, the whole of intelligence is at his disposal. Criticism of an intuitive philosophy is so easy and so certain to be well received that it will always tempt the beginner. Regret may come later,—unless, of course, there is a native lack of comprehension and, out of spite, personal resentment toward everything that is not reducible to the letter, toward all that is properly spirit. That can happen, for philosophy too has its Scribes and its Pharisees.

To metaphysics, then, we assign a limited object, principally spirit, and a special method, mainly intuition. In doing this we

make a clear distinction between metaphysics and science. But at the same time we attribute an equal value to both. I believe that they can both touch the bottom of reality. I reject the arguments advanced by philosophers, and accepted by scholars, on the relativity of knowledge and the impossibility of attaining the absolute.

Positive science, as a matter of fact, goes to sensible observation to obtain materials whose elaboration it entrusts to the faculty of abstracting and generalizing, to judgment and reasoning, to the intelligence. Having started from pure mathematics, it continued through mechanics, then through physics and chemistry; it arrived somewhat late in the day at biology. Its original domain, which has continued to be its preferred domain, is that of inert matter. It is less at its ease in the organized world, where it treads its way with an assured step only if it relies upon physics and chemistry; it clings to the physico-chemical in vital phenomena rather than to what is really vital in the living. But great is its embarrassment when it reaches the mind. That does not mean that it cannot obtain some knowledge of it; but this knowledge becomes all the more vague the farther it gets away from the common border-line between mind and matter. One will never advance on this new terrain as on the old, relying solely on the power of logic. One must ceaselessly appeal from the "esprit géométrique" to the "esprit de finesse": still, there is always something metaphorical in the formulas, however abstract, at which one arrives; as though the intelligence was obliged to transpose the psychic into the physical in order to understand and explain it. On the contrary, as soon as it comes back to inert matter, the science which arises from pure intelligence finds itself at home. This is in no way surprising. Our intelligence is the prolongation of our senses. Before we speculate we must live, and life demands that we make use of matter, either with our organs, which are natural tools, or with tools, properly so-called, which are artificial organs. Long before there was a philosophy and a science, the role of the intelligence was already that of manufacturing instruments and guiding the action of our body on surrounding bodies. Science has pushed this labor of the intelligence much further, but has not changed its direction. It aims above all at making us masters of matter. Even when sci-

ence is speculating, it is still devoting its attention to acting, the value of scientific theories being gauged constantly by the solidity of the grip they give us upon reality. But is that not precisely what should inspire us with complete confidence in positive science and also in the intelligence, its instrument? If the intellect has been made in order to utilize matter, its structure has no doubt been modelled upon that of matter. At least that is the simplest and most probable hypothesis. We should keep to it as long as it is not demonstrated to us that the intelligence deforms, transforms, constructs its object, or only brushes the surface, or grasps the mere semblance of it. Now nothing has ever been invoked by way of that demonstration, but the insoluble difficulties into which philosophy falls, the self-contradiction into which the intellect can fall when it speculates upon things as a whole—difficulties and contradictions we naturally come up against if the intellect is especially destined for the study of a part, and if we nevertheless mean to use it in knowing the whole. But it is not enough to say that. It is impossible to consider the mechanism of our intellect and the progress of our science without arriving at the conclusion that between intellect and matter there is, in fact, symmetry, concord and agreement. On one hand, matter resolves itself more and more, in the eyes of the scholar, into mathematical relations, and on the other hand, the essential faculties of our intellect function with an absolute precision only when they are applied to geometry.

Doubtless, it might have been possible for mathematical science not to take originally the form the Greeks gave it. No doubt it must also, whatever form it adopts, keep to a strict use of artificial signs. But prior to this formulated mathematics, which is in large measure made up of convention, there is another, virtual or implicit, which is natural to the human mind. If the necessity of working with certain symbols makes the approach to mathematics difficult for many of us, the mind, in compensation, as soon as it has surmounted the obstacle, moves in this domain with a facility it has nowhere else, evidence being in this case immediate and theoretically instantaneous, the effort to understand existing most often in fact but not in right. In any other order of study, on the contrary, there must be, for under-

standing, a maturation process of thought which in some way adheres to the result, essentially fills up duration, and cannot even theoretically be conceived as instantaneous. In short, we might believe in a divergence between matter and intellect if we were to consider in matter only the superficial impressions made upon our senses, and if we were to leave to our intellect the vague and hazy form it takes in its daily operations. But when we bring the intellect back to its precise contours and when we delve deeply enough into our sense-impressions so that matter begins to surrender to us its inner structure, we find that the articulations of the intellect apply exactly to those of matter. I therefore do not see why the science of matter should not reach an absolute. It instinctively assumes this scope, and all natural belief should be held as true, all appearance taken for reality, as long as its illusory character has not been established. Upon those who declare our science to be relative, upon those who claim that our knowledge deforms or constructs its object, now falls the burden of proof. And they cannot fulfill this obligation, for there is no room for the doctrine of the relativity of science when science and metaphysics are on their true ground, that to which we restore them.⁵

We recognize, furthermore, that the limits within which the intellect works have a certain elasticity, its contours a certain haziness, and that its indecision is exactly what permits it to be applied in some degree to the things of the mind. Matter and mind have this in common, that certain superficial agitations of matter are expressed in our minds, superficially, in the form of sensations; and on the other hand, the mind, in order to act upon the body, must descend little by little toward matter and become spatialized. It follows that the intelligence, although turned toward external things, can still be exerted on things internal, provided that it does not claim to plunge too deeply.

But the temptation is great to carry to the very depth of the mind the application of those procedures which are successful as long as one remains near the surface. If one gives in to it, one will obtain purely and simply a physics of the mind traced upon that of bodies. Together these two physics will constitute a complete system of reality, what is sometimes called a metaphysics. How

can one help but see that metaphysics thus understood fails to recognize the strictly spiritual in the mind, being only the extension to mind of what belongs to matter? And how can we help but see that in order to make this extension possible, we have had to take intellectual forms in a state of imprecision which still leaves them applicable to the superficial phenomena of the soul, and thereby condemns them to keeping less closely to the facts of the external world? Is it surprising that such a metaphysics, embracing both matter and mind at the same time, should give the effect of knowledge which is almost empty and in any case vague,—almost empty on the side of mind, since it has been able effectively to retain only superficial aspects of the soul, systematically vague on the side of matter, because the intelligence of the metaphysician must have sufficiently loosened its mechanism, and given it sufficient play to enable it to work equally well at the surface of matter or the surface of mind?

Quite different is the metaphysics that we place side by side with science. Granting to science the power of explaining matter by the mere force of intelligence, it reserves mind for itself. In this realm, proper to itself, it seeks to develop new functions of thought. Everyone can have noticed that it is more difficult to make progress in the knowledge of oneself than in the knowledge of the external world. Outside oneself, the effort to learn is natural; one makes it with increasing facility; one applies rules. Within, attention must remain tense and progress become more and more painful; it is as though one were going against the natural bent. Is there not something surprising in this? We are internal to ourselves, and our personality is what we should know best.

Yet such is not the case; our mind is as if it were in a strange land, whereas matter is familiar to it and in it the mind is at home. But that is because a certain ignorance of self is perhaps useful to a being which must exteriorize itself in order to act; it answers a necessity of life. Our action is exerted upon matter, and the farther the knowledge of matter has been pursued the more efficacious is the action. It is doubtless to one's advantage, if one is to act effectively, to think of what one will do, to understand what one has done, to have a clear conception of what one

might have done: nature invites us to do so; it is one of the traits which distinguishes man from the animal, completely intent as it is on the impression of the moment. But nature asks of us only a quick glance at our inner selves; we then perceive the mind, but the mind preparing to shape matter, already adapting itself to it, assuming something of the spatial, the geometric, the intellectual. A knowledge of the mind, in so far as it is properly spiritual, would rather keep us from that end. We draw nearer to it, on the contrary, when we study the structure of things. Thus nature turns mind away from mind, turns mind toward matter. But in that way we see how we can, if we like, indefinitely widen, deepen, and intensify the vision of the mind which has been granted us. Since the insufficiency of this vision is due in the first place to the fact that it is directed upon the mind already "spatialized" and divided into mental compartments where matter can be inserted, let us separate the mind from the space in which it is so at home, from the materiality which it takes to itself in order to rest upon matter. In so doing we shall restore it to itself and be able to comprehend it immediately. This direct vision of the mind by the mind is the chief function of intuition, as I understand it.

Intuition will be communicated only by the intelligence. It is more than idea; nevertheless in order to be transmitted, it will have to use ideas as a conveyance. It will prefer, however, to have recourse to the most concrete ideas, but those which still retain an outer fringe of images. Comparisons and metaphors will here suggest what cannot be expressed. That will not constitute a detour; it will amount to going straight to the goal. If one were constantly to speak an abstract, so-called "scientific" language, one would be giving of mind only its imitation by matter, for abstract ideas have been drawn from the external world and always imply a spatial representation: and yet one would think one had analyzed mind. Abstract ideas alone would, therefore, in such a case, be inviting us to imagine mind on the model of matter and to think it by transposition, that is, in the exact meaning of the word, by metaphor. Let us not be duped by appearances: there are cases in which it is imagery in language which knowingly expresses the literal meaning, and abstract lan-

guage which unconsciously expresses itself figuratively. The moment we reach the spiritual world, the image, if it merely seeks to suggest, may give us the direct vision, while the abstract term, which is spatial in origin and which claims to express, most frequently leaves us in metaphor.

To sum it all up, what is wanted is a difference in method between metaphysics and science: I do not acknowledge a difference in value between the two. Less modest in my claims for science than most scholars have been, I consider that a science founded on experience as the moderns understand it, can attain the essence of the real. No doubt it embraces no more than a part of reality; but some day it will reach the bottom of that part; in any case, it will approach it indefinitely. It is, therefore, already fulfilling half of the program of the old metaphysics: it could be called metaphysics did it not prefer to keep the name of science. There remains the other half. This half seems to me to get back by right to a metaphysics which also starts from experience, and which, too, is itself capable of attaining the absolute: we should call it science, did not science prefer to limit itself to the other part of reality. Metaphysics, then, is not the superior of positive science; it does not come, after science, to consider the same object in order to obtain a higher knowledge of it. To suppose such a connection between them, as is the almost invariable custom among philosophers, is to wrong both of them: science, which one condemns to relativity; metaphysics, which will never be anything more than a hypothetical and vague knowledge, since science will necessarily have taken to itself in advance everything precise and certain that can be known of its object. Quite different is the relation I establish between metaphysics and science. It is my belief that they are, or that they can become, equally precise and certain. They both bear upon reality itself. But each one of them retains only half of it so that one might see in them, if one wished, two subdivisions of science or two departments of metaphysics, if they did not mark divergent directions of the activity of thought.

Precisely because they are on the same level, they have points in common and each one can, upon these points, be verified by the other. To establish between metaphysics and science a dif-

ference in dignity, to assign to them the same object, that is to say, the totality of things, stipulating that the one shall look at them from below and the other from above, is to exclude this mutual aid and reciprocal verification: in that case, metaphysics is, of necessity,—unless it loses all contact with the real—a condensed extract or hypothetical extension of science. Instead of this, let us allot to them different objects; to science let us leave matter, and to metaphysics, mind: as mind and matter touch one another, metaphysics and science, all along their common surface, will be able to test one another, until contact becomes fecundation. The results obtained on either side will of necessity be linked, because matter links up with mind. If the insertion is not perfect, it will be because there is something to rectify in our science, or in our metaphysics, or in both. Metaphysics will thus, by its peripheral part, exert a salutary influence upon science. Conversely, science will communicate to metaphysics habits of precision which will spread through it from the periphery to the centre. If only because its extremities will have to fit exactly upon those of positive science, our metaphysics will be that of the world in which we live, and not of all possible worlds. It will embrace realities.

That is to say that science and metaphysics will differ in object and method, but will commune in experience. Both of them will have put away the vague knowledge stored up in the usual concepts and transmitted by means of words. After all, what were we asking for metaphysics that had not already been obtained for science? For a long time the road had been barred to positive science by the claim made of reconstituting reality with the concepts set down in language. The “low” and the “high,” the “heavy” and the “light,” the “dry” and the “moist” were the elements one used in explaining the phenomena of nature; concepts were weighed, measured out and combined: it was an intellectual chemistry instead of physics. When it brushed concepts aside in order to look at things, even science seemed to revolt against intelligence; the “intellectualism” of that time recombined the material object, *a priori*, with elementary ideas. In reality, this science became more intellectualist than the inadequate physics which it replaced. It was obliged to become

so, seeing that it was true, for matter and intellect are modelled upon one another, and in a science which reveals the exact configuration of matter our intellect necessarily finds its own image. The mathematical form which physics has taken is thus, at one and the same time, what best corresponds to reality and what is most satisfying to our understanding. Much less convenient will be the position of the true metaphysics. It also will begin by eliminating ready-made concepts; it also will rely upon experience. But that inner experience of which we speak will nowhere find a strictly appropriate language. It will of course be compelled to return to the concept, with at most the addition of the image; but then it will have to enlarge the concept, make it more flexible, and indicate, by the colored shading around the edges, that it does not contain the whole of experience. It is none the less true that metaphysics will have accomplished in its domain the reform that modern physics has brought about in its own.

Do not expect of this metaphysics simple conclusions or radical solutions. That would be tantamount to requiring that it be no more than a manipulation of concepts. That would also be leaving it in the region of the pure possible. In the realm of experience, on the contrary, with incomplete solutions and provisional conclusions, it will achieve an increasing probability which can ultimately become the equivalent of certitude. Suppose we take a problem which we shall state in the terms of traditional metaphysics: does the soul survive the body? It is easy to decide it once and for all by reasoning on pure concepts. We shall, then, define the soul and say with Plato that it is one and simple. We shall conclude that it cannot be dissolved. Therefore, it is immortal. Nothing could be clearer. But the conclusion holds good only if we accept the definition, that is, the construction. It is subordinated to this hypothesis; it is hypothetical. But suppose we give up constructing the idea of the soul as one constructs the idea of a triangle; let us look at the facts. If, as we believe, experience proves that only a minute part of conscious life is conditioned by the brain, it will follow that the suppression of the brain will probably leave conscious life subsisting. At least the burden of proof will rest now with him who denies the survival much more than with him who affirms it. It will only be a question of the degree of added life, I admit; we shall have to

have other reasons, drawn this time from religion, to arrive at a higher form of precision and attribute to this life an endless duration. But, even from the philosophical point of view, there will no longer be any *if*: we shall affirm categorically—I mean without subordination to a metaphysical hypothesis—what we affirm, were we only to affirm it as being probable. The first thesis had the beauty of the definitive, but it was suspended in thin air, in the region of the simple possible. The other is unfinished, but it pushes strong roots down into the real.

A young science is always quick to dogmatize. Having only a limited experience at its disposal, it works less upon facts than upon a few simple ideas, suggested by the facts or not, that it then treats deductively. Metaphysics, more than any other science, was exposed to this danger. A whole labor of clearing away is necessary in order to open up the way to inner experience. True, the faculty of intuition exists in each one of us, but covered over by functions more useful to life. The metaphysician worked therefore *a priori* on concepts already fixed in language, as if, descended from heaven, they revealed a supra-sensible reality to the mind. Thus was born the Platonic theory of ideas. Carried on the wings of Aristotelianism and neo-Platonism it traversed the Middle Ages; it inspired, sometimes unwittingly, the philosophers of modern times. These were often mathematicians whose habits of mind led them to see in metaphysics only a broader mathematics, embracing quality at the same time as quantity. Geometrical unity and simplicity are thus explained by most philosophies, complete systems of definitively set problems, integrally resolved. But this is not the only kind of reason. We must remember that modern metaphysics gave itself an object analogous to that of religion. It started out from a conception of the divinity. Whether it confirmed or invalidated the dogma, it felt itself obliged to dogmatize. Although it was founded on reason alone, it had the security of judgment that the theologian gets from revelation. One may wonder, it is true, why it chose this point of departure. But the point is, it had no choice in the matter. As it was working outside of experience upon pure concepts, it had no alternative but to cling to a concept from which one might deduce everything and which con-

tained everything. That was precisely the idea it had of God.

But why did it have this idea of God? That Aristotle had arrived at the point where he fused all concepts into a single one and posited as the principle of universal explanation a "Thought of Thought" closely related to the Platonic idea of the Good, and that modern philosophy, the continuator of Aristotle's, proceeded along a similar line, can, in an extremity, be understood. That God should have been called a principle which has nothing in common with the one humanity has always designated by the word *God*, is less easily comprehended. The god of ancient mythology and the God of Christianity have very little resemblance, no doubt; but prayers are made to both, and both are interested in man: static or dynamic, religion considers this point fundamental. And yet philosophy still manages to call God a Being Whose essence would forbid Him to take any account of human invocations, as though, theoretically embracing all things, He was in fact blind to our sufferings and deaf to our prayers. In going more deeply into this point one would find the confusion, natural to the human mind, between an explanatory idea and an active principle. Things being brought back to their concepts, the concepts fitting into one another, one finally arrives at an idea of ideas, by which one imagines that everything is explained. Truth to tell, it does not explain very much, first because it accepts the subdivision and the distribution of the real into concepts which society has deposited in language and which it had most often brought about for the sake of convenience; and in the second place because the synthesis it makes of these concepts is empty of matter and purely verbal. One wonders how this essential point escaped profound philosophers and how they could believe that they were distinguishing in any way whatsoever the principle set up by them as an explanation of the world, while they were merely representing it conventionally by a sign. As I said above: no matter what name you give to the "thing itself," whether you make of it the Substance of Spinoza, the Ego of Fichte, the Absolute of Schelling, the Idea of Hegel, or the Will of Schopenhauer, it will be useless for the word to present itself with its well-defined signification: it will lose it; it will be emptied of all meaning from

the moment it is applied to the totality of things. Speaking only of the last of these great “syntheses,” isn’t it evident that a Will is only will on condition that it is set off against what does not will? How then is mind to be set off against matter, if matter is itself will? To place will everywhere is the same as leaving it nowhere, for it is to identify the essence of what I feel within myself—duration, outpouring, continuous creation—with the essence of what I perceive in things, where there is evidently repetition, previsibility, necessity. It makes little difference to me if one says “Everything is mechanism” or “Everything is will”: in either case everything is identical. In both cases, “mechanism” and “will” become synonyms of “being” and consequently synonyms of each other. Therein lies the initial vice of philosophical systems. They think they are telling us something about the absolute by giving it a name. But once again the word can have a definite meaning when it designates a thing; it loses that meaning as soon as you apply it to all things. Yet once again, I know what will is if you mean by that my faculty of willing, or that faculty in creatures resembling me, or even the vital urge of organized beings, if it is to be analogous to my impulse of consciousness. But the more you increase the extension of the term, the more you diminish comprehension of it. If you include matter within its extension, you empty its comprehension of the positive characteristics by which spontaneity stands out against mechanism and liberty against necessity. When finally the word arrives at the point where it designates everything that exists, it means no more than existence. What advantage is there then in saying that the world is will, instead of simply stating that it is?

But the concept thus arrived at with its undetermined content, or rather lack of content, the concept which is no longer anything at all, we insist that it be everything. One therefore calls upon the God of religion Who is determination itself and, in addition, essentially active. He is at the summit of being: we make what we wrongly take to be the summit of knowledge coincide with Him. Something of the adoration and respect which humanity bestows upon Him passes, therefore, into the principle which has been embellished with His name. And that, to a large extent, is the source of the dogmatism of modern philosophy.

The truth is that an existence can be given only in an experience. This experience will be called vision or contact, exterior perception in general, if it is a question of a material object; it will take the name of intuition when it has to do with the mind. How far does intuition go? It alone will be able to say. It catches hold of a thread: it is for it to see whether this thread goes as far up as heaven or stops at some distance from the earth. In the first case, metaphysical experience will be bound up with that of the great mystics: I think I can state for my part that the truth lies there. In the second case, these two metaphysical experiences will remain isolated from one another without being mutually repugnant on that account. However one looks at it, philosophy will have raised us above the human state.

It already frees us of certain speculative certitudes when it posits the problem of the mind in terms of mind and not of matter, when, in a general way, it makes it unnecessary for us to employ concepts to do work for which most of them are not meant. These concepts are included in words. They have most often been elaborated by the social organism in view of an object which has nothing to do with metaphysics. In order to form them society has cut out reality according to its needs. Why should philosophy accept a division which in all probability will not correspond to the articulations of the real? This division, however, it does usually accept. It accepts the problem as it is posited by language. It is therefore condemned in advance to receive a ready-made solution or, at best, simply to choose between the two or three only possible solutions, which are co-eternal to this positing of the problem. One might just as well say that all truth is already virtually known, that its model is patented in the administrative offices of the state, and that philosophy is a jig-saw puzzle where the problem is to construct with the pieces society gives us the design it is unwilling to show us. One might just as well assign to the philosopher the role and the attitude of the schoolboy, who seeks the solution persuaded that if he had the boldness to risk a glance at the master's book, he would find it there, set down opposite the question. But the truth is that in philosophy and even elsewhere it is a question of *finding* the problem and consequently of *positing* it, even more

than of solving it. For a speculative problem is solved as soon as it is properly stated. By that I mean that its solution exists then, although it may remain hidden and, so to speak, covered up: the only thing left to do is to *uncover* it. But stating the problem is not simply uncovering, it is inventing. Discovery, or uncovering, has to do with what already exists actually or virtually; it was therefore certain to happen sooner or later. Invention gives being to what did not exist; it might never have happened. Already in mathematics and still more in metaphysics, the effort of invention consists most often in raising the problem, in creating the terms in which it will be stated. The stating and solving of the problem are here very close to being equivalent; the truly great problems are set forth only when they are solved. But many little problems are in the same position. I open an elementary treatise on philosophy. One of the first chapters deals with pleasure and pain. There the student is asked a question such as this: "Is pleasure happiness, or not?" But first one must know if pleasure and happiness are genera corresponding to a natural division of things into sections. Strictly speaking the phrase could signify simply: "Given the ordinary meaning of the terms *pleasure* and *happiness* should one say that happiness consists in a succession of pleasures?" It is then a question of vocabulary that is being raised; it can be solved only by finding out how the words "pleasure" and "happiness" have been used by the writers who have best handled the language. One will moreover have done a useful piece of work; one will have more accurately defined two ordinary terms, that is, two social habits. But if one claims to be doing more, to be grasping realities and not to be re-examining conventions, why should one expect terms, which are perhaps artificial (whether they are or not is not yet known since the object has not been studied), to state a problem which concerns the very nature of things? Suppose that in examining the states grouped under the name of pleasure they are found to have nothing in common except that they are states which man is seeking: humanity will have classified these very different things in one genus because it found them of the same practical interest and reacted toward all of them in the same way. Suppose on the other hand, that one

arrives at an analogous result in analyzing the idea of happiness. Immediately the problem disappears or rather is dissolved in entirely new problems of which we can know nothing, and whose terms we do not even possess, before having studied in itself the human activity of which society had formed from the outside, in order to arrive at the general ideas of *pleasure* and *happiness*, views that were perhaps artificial. Even then one must be assured that the concept of "human activity" itself is in accordance with a natural division. In this disarticulation of the real according to its own tendencies lies the principal difficulty, as soon as one leaves the domain of matter for that of mind.

This amounts to saying that the question of the origin and value of general ideas arises on the occasion of any philosophical problem, and that it calls for a particular solution in each case. The discussions which have been raised around it fill the history of philosophy. Perhaps it would be advisable to ask oneself, before any discussion, if these ideas do really constitute a genus and if it would not be precisely in dealing with general ideas that one would have to guard against generalities. Doubtless one can easily keep the general idea of general idea, if one insists. It is enough to say that we agree to call general idea a representation which groups an indefinite number of things under the same name: most words will thus correspond to a general idea. But the important question for the philosopher is to know by what operation, for what reason, and especially in virtue of what structure of the real, things can thus be grouped, and this question does not admit of a unique and simple solution.

Let me say at once that psychology seems to me to be wandering aimlessly in research of this kind when it has no guiding thread. Behind the working of the mind, which is the act, there is function. Behind general ideas there is the faculty of conceiving or perceiving generalities. The vital significance of this faculty must first of all be determined. In the labyrinth of acts, states and faculties of mind, the thread which one must never lose is the one furnished by biology. *Primum vivere*. Memory, imagination, conception and perception, generalization in short,

are not there "for nothing, for pleasure." It really seems, to listen to certain theorists, that the mind fell from heaven with a subdivision into psychological functions whose existence simply needs to be recognized: because these functions are such, they will no doubt be used in such a manner. I believe on the contrary that it is because they are useful, because they are necessary to life, that they are what they are: one must refer to the fundamental exigencies of life to explain their presence and to justify it if need be, I mean in order to know if the ordinary subdivision into such or such faculties is artificial or natural, and if in consequence we should maintain it or modify it. All our observations on the mechanism of function will be warped if we have badly cut it out of the continuity of the psychological tissue. Shall we say that the exigencies of life are analogous in men, animals and even plants, that our method therefore runs the risk of neglecting what is characteristically human in man? Without the slightest doubt: once psychological life is cut out and distributed, all is not finished; the growth and even the transfiguration of each faculty in man remains to be followed. But one will have at any rate some chance of not having traced arbitrary divisions in the mind's activity and more than one would fail in untangling plants whose stems and foliage are entwined and interlaced if one dug down to the roots.

Let us apply this method to the problem of general ideas: we shall find that every living being, perhaps even every organ, every tissue of a living being generalizes, I mean classifies, since it knows how to gather, in the environment in which it lies, from the most widely differing substances or objects, the parts or elements which can satisfy this or that one of its needs; the rest it disregards. Therefore it isolates the characteristic which interests it, going straight to a common property; in other words, it classifies, and consequently abstracts and generalizes. Doubtless, in almost all cases and probably in all other animals except man, abstraction and generalization are actually experienced and not thought. Yet, in the animal itself, we find representations which lack only reflection and some disinterestedness to be general ideas in the full sense of the term: if not, how should a cow that is being led stop before a meadow, no matter which, simply

because it enters into the category that we call grass or meadow? And how should a horse distinguish a stable from a granary, a road from a field, hay from oats? Moreover, to conceive, or rather to perceive generality in this way is also the characteristic of man in so far as he is animal, has instincts and needs. Without the intervention of his reflection or even his consciousness, a resemblance can be drawn from the most widely differing objects by one of his tendencies; it will classify these objects into a genus and create a general idea, acted rather than thought. These automatically extracted generalities are even much more numerous in man, who adds to instinct habits more or less capable of imitating the instinctive act. If we pass now to the complete general idea, I mean conscious, reflected, created with intention, we shall find most often at its base this automatic extraction of resemblances which is the essential of generalization. In one sense, nothing resembles anything, since all objects are different. In another sense everything resembles everything, since one will always find, by climbing high enough on the ladder of generalities, some artificial genus into which two different objects taken at random can go. But between impossible generalization and useless generalization there is another which is called forth in a prefiguration by the tendencies, habits, gestures and attitudes, the complexes of movements automatically accomplished or sketched, which are at the origin of most human general ideas. The resemblance between things or states, which we declare we see, is above all the quality common to these states or things, of obtaining from our body the same reaction, of making it sketch the same attitude and begin the same movements. The body extracts from the material or moral environment whatever has been able to influence it, whatever interests it: it is the identity of reaction to different actions which, playing upon them, gives them resemblance or brings it out. Thus a bell, under the most varied form of impact—a blow with the knuckle, a breath of wind, an electric current—will give out a sound which is always the same, will in that way convert these forms of impact into bell-ringers, and thus will make them resemble one another, individuals constituting a genus simply because the bell remains the same: bell, and nothing but bell, it

cannot do otherwise, if it reacts at all, than ring. It goes without saying that when reflection has raised to the state of pure thought representations which were scarcely more than the insertion of consciousness into a material frame, that is, attitudes and movements, it will form voluntarily, directly, by imitation, general ideas which will be nothing more than ideas. It will receive powerful assistance in this from the word, which will again furnish representation with a frame into which it can fit, but this time one that is more spiritual than corporeal. It is none the less true that in order to realize the true nature of concepts, and attack with some chance of success problems relating to general ideas, one will always have to look to the impact of thought upon the motor attitudes or habits, generalization being originally little else than habit, rising from the field of action to that of thought.

But, once the origin and structure of the general idea have thus been fixed, once the necessity of its appearance has been established, and furthermore, once the imitation of nature by the artificial construction of general ideas is noted, it still remains for us to find out how natural general ideas, which serve as a model to others, are possible, and why experience presents us with resemblances which we have only to translate into generalities. Among these resemblances there are some, naturally, which go to the fundamental root of things. Those will produce general ideas which will still be, to a certain extent, relative to the convenience of the individual and society, but which science and philosophy will have only to separate from this matrix to obtain a more or less approximate vision of some aspect of reality. They are few in number and the immense majority of general ideas are those which society has prepared for language with a view to conversation and action. Nevertheless, even among this majority we are especially referring to here, there are many which, by a series of intermediaries, after all sorts of manipulations, simplifications, and deformations, are linked with the small number of ideas which translate essential resemblances. It will often be instructive to go back with them, by a fairly long detour, to the resemblance to which they are linked. It might be useful, therefore, at this point to digress upon what

one might call objective generalities, inherent in reality itself. Limited in number as they may be, they are important both for themselves and for the confidence they radiate, lending something of their firmness to genera that are wholly artificial, just as banknotes printed in excess owe what little value they possess to the gold remaining in the coffers.

Going more deeply into this point, one would perceive, I think, that resemblances divide into three groups, the second of which will probably have to be subdivided as positive science progresses. The resemblances of the first category are biological in essence: they would have it that life should work *as if* life itself had general ideas, those of genus and species, *as if* it followed a certain limited number of structural plans, *as if* it had instituted general properties of life, finally and above all as if, by the double effect of hereditary transmission (for what is *innate*) and more or less slow transformation, it had wished to arrange the living in a hierarchical series, along a scale where the resemblances between individuals are more numerous the higher one goes. Whether one expresses oneself thus in terms of finality, or whether one attributes special properties to living matter, which imitate the intelligence, or indeed finally whether one adheres to some intermediate hypothesis, in principle it is always in reality itself (even if our classification is inexact in fact) that our subdivisions into species, genera, etc.—generalities which we translate into general ideas—will be based. And quite as well founded in right will be those resemblances which correspond to organs, tissues, cells, or even anything else which goes to make up living beings.

Now, if we pass from the organized to the unorganized, from living matter to matter inert and not yet informed by man, we find real genera but genera of quite a different character: qualities, such as colors, flavors, odors; elements or combinations, such as oxygen, hydrogen, water; finally, physical forces like gravity, heat, electricity. But what here brings the representations of individual groups under the general idea is an entirely different thing. Without going into detail, without complicating this explanation by taking into account shades of meaning, and further qualifying ahead of time anything exaggerated in our

distinction, and finally agreeing to give the word "resemblance" its most precise and also its narrowest meaning, we say that in the first case the principle of classification is resemblance properly so-called, and in the second it is identity. A certain shade of red can be identical to itself in all objects in which it is found. One could say the same of two notes of the same pitch, the same intensity and the same tone. Furthermore, rightly or wrongly, we feel we are progressing toward identical elements or events as we further examine matter and resolve the chemical into physical, the physical into mathematical. Now, a simple logic can claim that resemblance is a partial identity and that identity is a complete resemblance; nevertheless, experience teaches us something entirely different. If one ceases to give the word "resemblance" the vague and somewhat popular meaning we gave it to begin with, if one seeks to give "resemblance" its exact meaning through a comparison with "identity," it will be found, I believe, that identity is something *geometrical* and resemblance something *vital*. The first has to do with measure, the other belongs rather to the domain of art: it is often a purely aesthetic feeling which prompts the evolutionary biologist to suppose related forms between which he is the first to see a resemblance: the very design he gives these forms reveals at times the hand and especially the eye of the artist. But if the identical thus contrasts so strongly with the resembling, there might be grounds for seeking to determine, for this new category of general ideas as for the other, what makes it possible.

Such an investigation could achieve its object only in a more advanced state of our knowledge of matter. Let us be content with a word on the hypothesis to which our deeper examination of life would lead us. If there is green which in thousands and thousands of different places is the same green (at least to our eye, or approximately), if it is the same for other colors, and if the differences of color depend upon the more or less great frequency of the elementary physical events we condense into color perception, the possibility of these frequencies presenting us at all times and in all circumstances with a few specific colors comes from the fact that all possible frequencies are (within certain limits, of course) everywhere and always realized. Then

those which correspond to our various colors will necessarily be produced with all the others, at whatever time or place; the repetition of the identical, which in this case makes it possible to constitute genera, will have no other origin. With modern physics more and more clearly revealing to us differences in number behind our distinctions of quality, an explanation of this genus probably is valid for all the genera and all the elementary generalities (capable of being combined by us to form others) which we find in the world of inert matter. The explanation would be completely satisfactory, it is true, only if it also explained why our perception picks up, in the immense field of frequencies, those particular frequencies which will be the various colors,—why, in the first place, it picks any up; why, in the second place, it picks up those rather than others. I have answered this special question in an earlier work by defining living being as a certain power to act, determined in quantity and quality: it is this virtual action which extracts from matter our real perceptions, information it needs for its own guidance, condensations within an instant of our duration of thousands, millions, trillions of events taking place in the enormously less drawn-out duration of things. This difference of tension exactly measures the interval between physical determination and human liberty, at the same time that it explains their duality and coexistence.⁶ If, as I believe, the appearance of man or of some being of the same essence is the *raison d'être* of life on our planet, it must be said that all the categories of perception, not only of men but of animals and even of plants (which can behave as *though* they had perceptions), correspond, on the whole, to the choice of a certain *order of greatness* for condensation. That is a simple hypothesis, but it seems to me to issue quite naturally from the speculations of physics on the structure of matter. What would become of the table upon which I am at this moment writing if my perception, and consequently my action, was made for the order of greatness to which the elements, or rather the events, which go to make up its materiality, correspond? My action would be dissolved; my perception would embrace, at the place where I see my table and in the short moment I have to look at it, an immense universe and a no less

interminable history. It would be impossible for me to understand how this moving immensity can become, so that I may act upon it, a simple rectangle, motionless and solid. It would be the same for all things and all events: the world in which we live, with the actions and reactions of its parts upon each other, is what it is by virtue of a certain choice in the scale of greatness, a choice which is itself determined by our power of acting. Nothing would prevent other worlds, corresponding to another choice, from existing with it, in the same place and the same time: in this way twenty different broadcasting stations throw out simultaneously twenty different concerts which coexist without any one of them mingling its sounds with the music of another, each one being heard, complete and alone, in the apparatus which has chosen for its reception the wave-length of that particular station. But let us not give too much of our attention to a question we found in our path. There is no need of a hypothesis on the intimate structure of matter to see that the conceptions which correspond to the properties and actions of matter, are possible or are what they are only by reason of the mathematics imminent in things. That is all I wished to recall in order to justify a classification of general ideas which places on one side the geometric, and on the other, the vital,—the former bringing with it identity, and the latter, resemblance.

We must now go on to the third category we mentioned, to general ideas created whole by human speculation and action. Man is essentially a manufacturer. Nature, in denying him ready-made instruments like those the insects have, for example, has given him intelligence, that is to say, the power of inventing and constructing an indefinite number of tools. Now, no matter how simple the thing made, it is done after a model, perceived or imagined: the genus defined by either the model itself or the diagram of its construction is real. All our civilization thus rests upon a certain number of general ideas with whose contents we are sufficiently acquainted, since we made them, and which are invaluable, since we could not live without them. That, in part, explains the belief in the absolute reality of Ideas in general, perhaps even in their divinity. We know what role it plays in ancient philosophy, and even in our own. All general ideas benefit from

the objectivity of certain among them. We might add that the productive activity of man is not exerted solely upon matter. Once in possession of the three kinds of general ideas we have enumerated, especially of the latter, our intelligence has what we called the general idea of general idea. It can then construct general ideas as it likes. It begins naturally with those which can be of greatest advantage to social life, or simply which are connected with social life; then will come those which concern pure speculation; and finally those one constructs for no particular reason, for the mere pleasure of doing so. But for almost all the concepts which do not belong in our first two categories, that is, for the immense majority of general ideas, it is the interest of society with that of individuals, it is the exigencies of conversation and action, which preside at their birth.

Let us finish this long digression upon which we embarked to show to what extent there is a need for recasting and sometimes completely setting aside conceptual thought in order to arrive at a more intuitive philosophy. This philosophy, we were saying, will often turn aside from the social vision of the object already made; it will ask us to participate, in spirit, in the act which makes it. It will therefore turn us back, on this particular point, in the direction of the divine. What is essentially human is, in fact, the labor of an individual thought which accepts, just as it is, its insertion into social thought and which utilizes pre-existing ideas as it utilizes any other tool furnished by the community. But there is already something quasi divine in the effort, however humble it may be, of a mind which re-inserts itself into the vital impetus, the generator of societies which in turn are the generators of ideas.

This effort will exorcise certain phantom problems which obsess the metaphysician, that is to say, each one of us. I should like to talk about those distressing and insoluble problems which have no bearing on what is, but bear rather upon what is not. Such is the problem of the origin of being: "How can it be that something exists—matter, mind, or God? There must have been a cause, and a cause of the cause, and so on indefinitely." We go back then from cause to cause; and if we stop somewhere along

the way, it is not because our intelligence seeks nothing beyond that, it is because our imagination finally shuts its eyes, as though over the abyss, to avoid dizziness. Such, again, is the problem of order in general: "Why an ordered reality, where our thought finds itself as in a mirror? Why is the world not incoherent?" I say that these problems relate to what is not rather than to what is. Never indeed would one be astonished at the existence of something,—matter, mind, God,—if one did not implicitly admit the possible existence of nothing. We imagine, or better still, we think we imagine, that being filled a void and that nothingness logically existed before being: primordial reality—whether we call it matter, mind or God—would then be superadded, and that is incomprehensible. In the same way one would not ask oneself why order exists if one did not think one conceived a disorder which presumably submitted to order and which consequently preceded it, at least ideally. Order would therefore need to be explained, while disorder, existing by right, would not demand explanation. Such is the point of view at which one is in danger of remaining as long as one merely seeks to comprehend. But let us go further and try to engender (we can do so obviously only in thought). To the extent that we distend our will, tend to reabsorb our thought in it and get into greater sympathy with the effort which engenders things, these formidable problems recede, diminish, disappear. For we feel that a divinely creative will or thought is too full of itself, in the immensity of its reality, to have the slightest idea of a lack of order or lack of being. To imagine the possibility of absolute disorder, all the more the possibility of nothingness, would be for it to say to itself that it might have not existed at all, and that would be a weakness incompatible with its nature which is force. The more we turn toward this creative will, the more the doubts which trouble the sane and normal man seem to us abnormal and morbid. Take for example the doubter who closes a window, then returns to verify its closing, then verifies his verification, and so forth. If we ask him what his motives are he will answer that he might have opened the window each time he tried to close it more securely. And if he is a philosopher he will transpose intellectually the hesitation of his conduct into this

question: "How can one be sure, definitively sure, that one has done what one intended to do?" But the truth is that his power of action is defective, and therein lies the evil from which he suffers: he had only partial will to accomplish the act, and that is why the accomplished act leaves him only partial certitude. Now can we solve the problem this man sets himself? Obviously not, but neither do we set the problem; therein lies our superiority. At first glance I might think there is more in him than in me because we both shut the window and he, in addition, raises a philosophical question while I do not. But the question which in his case is superadded to the task accomplished represents in reality only something negative; it is not something more, but something less; it is a deficit of the will. Such is exactly the effect certain "great problems" produce in us when we set ourselves again in the direction of generating thought. They recede toward zero as fast as we approach this generating thought, as they fill only that space between it and us. Thus we discover the illusion of him who thinks he is doing more by raising these problems than by not raising them. One might just as well think that there is more in a half-consumed bottle than in a full one, because the latter contains only wine, while in the former there is wine and emptiness in addition.

But as soon as we have intuitively perceived the true, our intellect recovers itself, corrects itself, intellectually formulates its error. It has received the suggestion; it furnishes the verification. As the diver feels out the wreck on the sea floor that the aviator has pointed out from the air, so the intellect immersed in the conceptual environment verifies from point to point, by contact, analytically, what had been the object of a synthetic and super-intellectual vision. If it had not been for a warning from without, the thought of a possible illusion would never even have occurred to it, for its illusion was a part of its nature. Shaken from its slumber, it will analyze the ideas of disorder, of nothingness and their like. It will recognize—if only for an instant, even though the illusion were to reappear the moment it had been dispelled—that one cannot suppress one arrangement without another arrangement taking its place, or take away matter without some other matter replacing it. "Disorder" and

“nothingness” in reality designate therefore a presence—the presence of a thing or an order which does not interest us, which blunts our effort or our attention; it is our disappointment being expressed when we call this presence absence. Consequently, to speak of the absence of all order and all things, that is, to speak of absolute disorder and absolute nothingness, is to pronounce words void of meaning, *flatus vocis*, since a suppression is simply a substitution envisaged by a single one of its two sides, and since the abolition of all order and all things would be a substitution with but a single side,—an idea which has exactly as much existence as a round square. When the philosopher speaks of chaos and nothingness he is only carrying over into the order of speculation,—raised to the absolute and consequently emptied of all meaning, of all effective content,—two ideas made for practical use and which were related to a particular kind of matter or order, but not to all order or all matter. That being so, what becomes of the two problems of the origin of order and the origin of being? They fade away since they only arise if one represents being and order as “what turned up,” and consequently nothingness and *disorder* as possibles or at least as conceivables. But those are only words, mirages of ideas.

Let human thought but become impregnated with this conviction, let it be freed of this obsession: immediately it begins to breathe. It no longer worries over questions which retarded its progress.⁷ The difficulties raised for example by ancient skepticism and modern criticism in turn are seen to disappear. It can equally well ignore Kantian philosophy and the “theories of knowledge” which derive from it; it will not pay any attention to them. The whole object of the *Critique of Pure Reason* is, in fact, to explain how a particular order is superadded to supposedly incoherent materials. And we know what price it makes us pay for this explanation according to which the human mind imposes its form upon a “sensible diversity” of unexplained origin; and the order we find in things is the order we ourselves put in them. With the result that science would be legitimate, but relative to our faculty of knowing, and metaphysics impossible, since there would be no knowledge outside of science. The human mind is thus relegated to a corner, like a schoolboy in