

Pierre Teilhard De Chardin



THE PHENOMENON OF MAN

WITH AN INTRODUCTION
BY SIR JULIAN HUXLEY

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Contents

THE PHENOMENON OF MAN

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TRANSLATOR'S NOTE

Perhaps a word may be permitted about some of the lesser problems involved in the translation of this book.

The author's style is all his own. In some instances he coins words to express his thought—'hominisation', for instance, or 'noosphere'—and in others he adapts words to his own ends, as when he talks of the 'within' and the 'without' of things. His meaning, however, should become apparent as his thought unfolds, and I have dispensed with cumbersome efforts at defining his terms.

As far as possible I have dispensed with italics for his neologisms—they are repeated too often to stand italicisation in a work already thickly sprinkled with italics for emphasis. I have also, in obedience to the conventions of typography in England, eliminated the author's initial capitals for all abstract nouns such as 'science', 'life', 'thought', and also for 'world', 'universe', 'man' and other such key-words of his work. There were disadvantages in this decision, but at least the printed page looks more normal to the English reader.

A number of people have contributed to the translation, some by substantial paper work, others by suggestions; and the outcome is in a sense a joint effort. Outstanding among participants are Mr. Geoffrey Sainsbury, Dr. A. Tindell Hopwood, Professor D. M. MacKinnon and Mr. Noel Lindsay. At times versions or suggestions have been conflicting and I have had to take it on myself to make an editorial decision. The translators' notes appear in square brackets. I should like to thank my wife, without whom it would have been impossible to produce this version. Finally, I must take on myself responsibility for the inadequacies that still persist.

BERNARD WALL

Introduction by Sir Julian Huxley

The Phenomenon of Man is a very remarkable work by a very remarkable human being. Père Teilhard de Chardin was at the same time a Jesuit Father and a distinguished palaeontologist. In *The Phenomenon of Man* he has effected a threefold synthesis—of the material and physical world with the world of mind and spirit ; of the past with the future ; and of variety with unity, the many with the one. He achieves this by examining every fact and every subject of his investigation *sub specie evolutionis*, with reference to its development in time and to its evolutionary position. Conversely, he is able to envisage the whole of knowable reality not as a static mechanism but as a process. In consequence, he is driven to search for human significance in relation to the trends of that enduring and comprehensive process ; the measure of his stature is that he so largely succeeded in the search. I would like to introduce *The Phenomenon of Man* to English readers by attempting a summary of its general thesis, and of what appear to me to be its more important conclusions.

I make no excuse for this personal approach. As I discovered when I first met Père Teilhard in Paris in 1946, he and I were on the same quest, and had been pursuing parallel roads ever since we were young men in our twenties. Thus, to mention a few signposts which I independently found along my road, already in 1913 I had envisaged human evolution and biological evolution as two phases of a single process, but separated by a 'critical point', after which the properties of the evolving material underwent radical change. This thesis I developed years later in my *Uniqueness of Man*, adding that man's evolution was unique in showing the dominance of convergence over divergence : in

the same volume I published an essay on *Scientific Humanism* (a close approximation to Père Teilhard's *Neo-Humanism*), in which I independently anticipated the title of Père Teilhard's great book by describing humanity as a phenomenon, to be studied and analysed by scientific methods. Soon after the first World War, in *Essays of a Biologist*, I made my first attempt at defining and evaluating evolutionary progress.

In my Romanes Lecture on *Evolutionary Ethics*, I made an attempt (which I now see was inadequate, but was at least a step in the right direction) to relate the development of moral codes and religions to the general trends of evolution ; in 1942, in my *Evolution, the Modern Synthesis*, I essayed the first comprehensive post-Mendelian analysis of biological evolution as a process : and just before meeting Père Teilhard had written a pamphlet entitled *Unesco : its Purpose and Philosophy*, where I stressed that such a philosophy must be a global, scientific and evolutionary humanism. In this, I was searching to establish an ideological basis for man's further cultural evolution, and to define the position of the individual human personality in the process—a search in which I was later much aided by Père Teilhard's writings, and by our conversations and correspondence.

The Phenomenon of Man is certainly the most important of Père Teilhard's published works. Of the rest, some, including the essays in *La Vision du Passé*, reveal earlier developments or later elaborations of his general thought ; while others, like *L'Apparition de l'Homme*, are rather more technical.

Père Teilhard starts from the position that mankind in its totality is a phenomenon to be described and analysed like any other phenomenon : it and all its manifestations, including human history and human values, are proper objects for scientific study.

His second and perhaps most fundamental point is the absolute necessity of adopting an evolutionary point of view. Though for certain limited purposes it may be useful to think of phenomena as isolated statically in time, they are in point of fact never static : they are always processes or parts of processes.

The different branches of science combine to demonstrate that the universe in its entirety must be regarded as one gigantic process, a process of becoming, of attaining new levels of existence and organisation, which can properly be called a genesis or an evolution. For this reason, he uses words like *noogenesis*, to mean the gradual evolution of mind or mental properties, and repeatedly stresses that we should no longer speak of a cosmology but of a *cosmogenesis*. Similarly, he likes to use a pregnant term like *hominisation* to denote the process by which the original proto-human stock became (and is still becoming) more truly human, the process by which potential man realised more and more of his possibilities. Indeed, he extends this evolutionary terminology by employing terms like *ultra-hominisation* to denote the deducible future stage of the process in which man will have so far transcended himself as to demand some new appellation.

With this approach he is rightly and indeed inevitably driven to the conclusion that, since evolutionary phenomena (of course including the phenomenon known as man) are processes, they can never be evaluated or even adequately described solely or mainly in terms of their origins : they must be defined by their direction, their inherent possibilities (including of course also their limitations), and their deducible future trends. He quotes with approval Nietzsche's view that man is unfinished and must be surpassed or completed ; and proceeds to deduce the steps needed for his completion.

Père Teilhard was keenly aware of the importance of vivid and arresting terminology. Thus in 1925 he coined the term *noosphere* to denote the sphere of mind, as opposed to, or rather superposed on, the biosphere or sphere of life, and acting as a transforming agency promoting hominisation (or as I would put it, progressive psychosocial evolution). He may perhaps be criticised for not defining the term more explicitly. By *noosphere* did he intend simply the total pattern of thinking organisms (i.e. human beings) and their activity, including the patterns of their interrelations : or did he intend the special environment of man, the systems of organised thought and its

products in which men move and have their being, as fish swim and reproduce in rivers and the sea?¹ Perhaps it might have been better to restrict *noosphere* to the first-named sense, and to use something like *noosystem* for the second. But certainly *noosphere* is a valuable and thought-provoking word.

He usually uses *convergence* to denote the tendency of mankind, during its evolution, to superpose centripetal on centrifugal trends, so as to prevent centrifugal differentiation from leading to fragmentation, and eventually to incorporate the results of differentiation in an organised and unified pattern. Human convergence was first manifested on the genetic or biological level: after *Homo sapiens* began to differentiate into distinct races (or *subspecies*, in more scientific terminology) migration and inter-marriage prevented the pioneers from going further, and led to increasing interbreeding between all human variants. As a result, man is the only successful type which has remained as a single interbreeding group or species, and has not radiated out into a number of biologically separated assemblages (like the birds, with about 8,500 species, or the insects with over half a million).

Cultural differentiation set in later, producing a number of psychosocial units with different cultures. However, these 'inter-thinking groups', as one writer has called them, are never so sharply separated as are biological species; and with time, the process known to anthropologists as cultural diffusion, facilitated by migration and improved communications, led to an accelerating counter-process of cultural convergence, and so towards the union of the whole human species into a single interthinking group based on a single self-developing framework of thought (or *noosystem*).

In parenthesis, Père Teilhard showed himself aware of the

¹ In *Le Phénomène Humain* (p. 201) he refers to the *noosphere* as a new layer or membrane on the earth's surface, a 'thinking layer' superposed on the living layer of the *biosphere* and the lifeless layer of inorganic material, the *lithosphere*. But in his earlier formulation of 1925, in *La Vision du Passé* (p. 92), he calls it 'une sphère de la réflexion, de l'invention consciente, de l'union sentie des âmes'.

danger that this tendency might destroy the valuable results of cultural diversification, and lead to drab uniformity instead of to a rich and potent pattern of variety-in-unity. However, perhaps because he was (rightly) so deeply concerned with establishing a global unification of human awareness as a necessary prerequisite for any real future progress of mankind, and perhaps also because he was by nature and inclination more interested in rational and scientific thought than in the arts, he did not discuss the evolutionary value of cultural variety in any detail, but contented himself by maintaining that East and West are culturally complementary, and that both are needed for the further synthesis and unification of world thought.

Before passing to the full implications of human convergence, I must deal with Père Teilhard's valuable but rather difficult concept of *complexification*. This concept includes, as I understand it, the genesis of increasingly elaborate organisation during cosmogenesis, as manifested in the passage from subatomic units to atoms, from atoms to inorganic and later to organic molecules, thence to the first subcellular living units or self-replicating assemblages of molecules, and then to cells, to multicellular individuals, to cephalised metazoa with brains, to primitive man, and now to civilised societies.

But it involves something more. He speaks of complexification as an all-pervading tendency, involving the universe in all its parts in an *enroulement organique sur soi-même*, or by an alternative metaphor, as a *reploiement sur soi-même*. He thus envisages the world-stuff as being 'rolled up' or 'folded in' upon itself, both locally and in its entirety, and adds that the process is accompanied by an increase of energetic 'tension' in the resultant 'corpuscular' organisations, or individualised constructions of increased organisational complexity. For want of a better English phrase, I shall use *convergent integration* to define the operation of this process of self-complexification.

Père Teilhard also maintains that complexification by convergent integration leads to the intensification of mental subjective activity—in other words to the evolution of progressively more

Throughout this period, he had been actively developing his ideas, and had written his spiritual autobiography, *Le Cœur de la Matière*, the semi-technical *Le Groupe Zoologique Humain*, and various technical and general articles later included in the collections entitled *La Vision du Passé* and *L'Apparition de l'Homme*.

He was prevailed on to leave his manuscripts to a friend. They therefore could be published after his death, since permission to publish is only required for the work of a living writer. The prospect of eventual publication must have been a great solace to him, for he certainly regarded his general and philosophical writings as the keystone of his life's work, and felt it his supreme duty to proclaim the fruits of his labour.

It was my privilege to have been a friend and correspondent of Père Teilhard for nearly ten years ; and it is my privilege now to introduce this, his most notable work, to English-speaking readers.

His influence on the world's thinking is bound to be important. Through his combination of wide scientific knowledge with deep religious feeling and a rigorous sense of values, he has forced theologians to view their ideas in the new perspective of evolution, and scientists to see the spiritual implications of their knowledge. He has both clarified and unified our vision of reality. In the light of that new comprehension, it is no longer possible to maintain that science and religion must operate in thought-tight compartments or concern separate sectors of life ; they are both relevant to the whole of human existence. The religiously-minded can no longer turn their backs upon the natural world, or seek escape from its imperfections in a supernatural world ; nor can the materialistically-minded deny importance to spiritual experience and religious feeling.

Like him, we must face the phenomena. If we face them resolutely, and avail ourselves of the help which his intellectual and spiritual travail has provided, we shall find a more assured basis for our thought and a more certain direction for our evolu-

tionary advance. But, like him, we must not take refuge in abstractions of generalities. He always took account of the specific realities of man's present situation, though set against the more general realities of long-term evolution ; and he always endeavoured to think concretely, in terms of actual patterns of organisation—their development, their mode of operation and their effects.

As a result, he has helped us to define more adequately both our own nature, the general evolutionary process, and our place and role in it. Thus clarified, the evolution of life becomes a comprehensible phenomenon. It is an anti-entropic process, running counter to the second law of thermodynamics with its degradation of energy and its tendency to uniformity. With the aid of the sun's energy, biological evolution marches uphill, producing increased variety and higher degrees of organisation.

It also produces more varied, more intense and more highly organised mental activity or awareness. During evolution, awareness (or if you prefer, the mental properties of living matter) becomes increasingly important to organisms, until in mankind it becomes the most important characteristic of life, and gives the human type its dominant position.

After this critical point has been passed, evolution takes on a new character : it becomes primarily a psychosocial process, based on the cumulative transmission of experience and its results, and working through an organised system of awareness, a combined operation of knowing, feeling and willing. In man, at least during the historical and proto-historical periods, evolution has been characterised more by cultural than by genetic or biological change.

On this new psychosocial level, the evolutionary process leads to new types and higher degrees of organisation. On the one hand there are new patterns of co-operation among individuals—co-operation for practical control, for enjoyment, for education, and notably in the last few centuries, for obtaining new knowledge ; and on the other there are new patterns of thought, new organisations of awareness and its products.

INTRODUCTION

As a result, new and often wholly unexpected possibilities have been realised, the variety and degree of human fulfilment has been increased. Père Teilhard enables us to see which possibilities are in the long run desirable. What is more, he has helped to define the conditions of advance, the conditions which will permit an increase of fulfilment and prevent an increase of frustration. The conditions of advance are these : global unity of mankind's noetic organisation or system of awareness, but a high degree of variety within that unity ; love, with goodwill and full co-operation ; personal integration and internal harmony ; and increasing knowledge.

Knowledge is basic. It is knowledge which enables us to understand the world and ourselves, and to exercise some control or guidance. It sets us in a fruitful and significant relation with the enduring processes of the universe. And, by revealing the possibilities of fulfilment that are still open, it provides an overriding incentive.

We, mankind, contain the possibilities of the earth's immense future, and can realise more and more of them on condition that we increase our knowledge and our love. That, it seems to me, is the distillation of *The Phenomenon of Man*.

London, December 1958

Preface

In this book is to be properly understood, it must be read not as a work on metaphysics, still less as a sort of theological essay, but purely and simply as a scientific treatise. The title itself indicates that. This book deals with man *solely* as a phenomenon ; but it also deals with the *whole* phenomenon of man.

In the first place, it deals with man *solely* as a phenomenon. The pages which follow do not attempt to give an explanation of the world, but only an introduction to such an explanation. Put quite simply, what I have tried to do is this ; I have chosen man as the centre, and around him I have tried to establish a coherent order between antecedents and consequents. I have not tried to discover a system of ontological and causal relations between the elements of the universe, but only an experimental law of recurrence which would express their successive appearance in time. Beyond these first purely *scientific* reflections, there is obviously ample room for farther-reaching speculations of the philosopher and the theologian. Of set purpose, I have at all times carefully avoided venturing into that field of the essence of being. At most I am confident that, on the plane of experience, I have identified with some accuracy the combined movement towards unity, and have marked the places where philosophical and religious thinkers, in pursuing the matter further, would be entitled, for reasons of a higher order, to look for breaches of continuity.¹

But this book also deals with the *whole* phenomenon of man. Without contradicting what I have just said (however much it may appear to do so) it is this aspect which might possibly make my suggestions *look* like a philosophy. During the last fifty years

¹ See, for example, the footnotes on pp. 169, 186, 298.

than any other) to tell of the whole course of evolution—evolution of love, evolution of war, evolution of research, evolution of the social sense. But each one, just because it is evolutionary, undergoes a metamorphosis as it crosses the threshold of reflection. Beyond this point it is enriched by new possibilities, new colours, new fertility. It is the same thing, if you like, but it is something quite different also—a figure that has become transformed by a change of space and dimension, discontinuity superimposed upon continuity, mutation upon evolution.

In this supple inflection, in this harmonious recasting which transfigures the whole grouping of vital antecedences, both external and internal, we cannot fail to find precious confirmation of what we had already guessed. When an object begins to grow in one of its accessory parts, it is thrown out of equilibrium and becomes deformed. To remain symmetrical and beautiful a body must be modified simultaneously throughout, in the direction of one of its principal axes. Reflection conserves even while re-shaping all the lines of the phylum on which it settles. There is no fortuitous excrescence of a parasitic energy. Man only progresses by slowly elaborating from age to age the essence and the totality of a universe deposited within him.

To this grand process of sublimation it is fitting to apply with all its force the word *hominisation*. Hominisation can be accepted in the first place as the individual and instantaneous leap from instinct to thought, but it is also, in a wider sense, the progressive phyletic spiritualisation in human civilisation of all the forces contained in the animal world.

Thus we are led—after having considered the element and pictured the species—to contemplate the earth in its totality.

c. The Threshold of the Terrestrial Planet : the Noosphere

When compared to all the living vetricils, the human phylum is not like any other. But because the specific orthogenesis of

the primates (urging them towards increasing cerebralisation) coincides with the axial orthogenesis of organised matter (urging all living things towards a higher consciousness) man, appearing at the heart of the primates, flourishes on the leading shoot of zoological evolution. It was with this observation that we rounded off our remarks on the state of the Pliocene world.

It is easy to see what privileged value that unique situation will confer upon the transit to reflection.

'The biological change of state terminating in the awakening of thought does not represent merely a critical point that the individual or even the species must pass through. Vaster than that, it affects life itself in its organic totality, and consequently it marks a transformation affecting the state of the entire planet.'

Such is the evidence—born of all the other testimony we have gradually assembled and added together in the course of our inquiry—which imposes itself irresistibly on both our logic and observation.

We have been following the successive stages of the same grand progression from the fluid contours of the early earth. Beneath the pulsations of geo-chemistry, of geo-tectonics and of geo-biology, we have detected one and the same fundamental process, always recognisable—the one which was given material form in the first cells and was continued in the construction of nervous systems. We saw geogenesis promoted to biogenesis, which turned out in the end to be nothing else than psychogenesis.

With and within the crisis of reflection, the next term in the series manifests itself. Psychogenesis has led to man. Now it faces itself, relieved or absorbed by another and a higher function—the engendering and subsequent development of the mind, in one word *noogenesis*. When for the first time in a living creature instinct perceived itself in its own mirror, the whole world took a pace forward.

As regards the choices and responsibilities of our activity, the consequences of this discovery are enormous. As regards our understanding of the earth they are decisive.

Geologists have for long agreed in admitting the zonal composition of our planet. We have already spoken of the barysphere, central and metallic, surrounded by the rocky lithosphere that in turn is surrounded by the fluid layers of the hydrosphere and the atmosphere. Since Suess, science has rightly become accustomed to add another to these four concentric layers, the living membrane composed of the fauna and flora of the globe, the biosphere, so often mentioned in these pages, an envelope as definitely universal as the other 'spheres' and even more definitely individualised than them. For, instead of representing a more or less vague grouping, it forms a single piece, of the very tissue of the genetic relations which delineate the tree of life.

The recognition and isolation of a new era in evolution, the era of noogenesis, obliges us to distinguish correlatively a support proportionate to the operation—that is to say, yet another membrane in the majestic assembly of telluric layers. A glow ripples outward from the first spark of conscious reflection. The point of ignition grows larger. The fire spreads in ever widening circles till finally the whole planet is covered with incandescence. Only one interpretation, only one name can be found worthy of this grand phenomenon. Much more coherent and just as extensive as any preceding layer, it is really a new layer, the 'thinking layer', which, since its germination at the end of the Tertiary period, has spread over and above the world of plants and animals. In other words, outside and above the biosphere there is the noosphere.

With that it bursts upon us how utterly warped is every classification of the living world (or, indirectly, every construction of the physical one) in which man only figures logically as a *genus* or a new family. This is an error of perspective which deforms and uncrowns the whole phenomenon of the universe. To give man his true place in nature it is not enough to find one more pigeon-hole in the edifice of our systematisation or even an additional order or branch. With hominisation, in spite of the insignificance of the anatomical leap, we have the begin-

ning of a new age. The earth 'gets a new skin'. Better still, it finds its soul.

Therefore, given its place in reality in proper dimensions, the historic threshold of reflection is much more important than any zoological gap, whether it be the one marking the origin of the tetrapods or even that of the metazoa. Among all the stages successively crossed by evolution, the birth of thought comes directly after, and is the only thing comparable in order of importance to, the condensation of the terrestrial chemism or the advent of life itself.

The paradox of man resolves itself by passing beyond measure. Despite the relief and harmony it brings to things, this perspective at first sight disconcerting, running counter as it does to the illusion and habits which incline us to measure events by their material face. It also seems to us extravagant because, steeped as we are in what is human like a fish in the sea, we have difficulty in emerging from it in our minds so as to appreciate its specificness and breadth. But let us look round us a little more carefully. This sudden deluge of cerebralisation, this biological invasion of a new animal type which gradually eliminates or subjects all forms of life that are not human, this irresistible tide of fields and factories, this immense and growing edifice of matter and ideas—all these signs that we look at, for days on end—to proclaim that there has been a change on the earth and a change of planetary magnitude.

There can indeed be no doubt that, to an imaginary geologist coming one day far in the future to inspect our fossilised globe, the most astounding of the revolutions undergone by the earth would be that which took place at the beginning of what has rightly been called the psychozoic era. And even today, to a Martian capable of analysing sidereal radiations psychically no less than physically, the first characteristic of our planet would be, not the blue of the seas or the green of the forests, but the phosphorescence of thought.

The greatest revelation open to science today is to perceive that everything precious, active and progressive originally con-

tained in that cosmic fragment from which our world emerged, is now concentrated in a 'crowning' noosphere.

And what is so supremely instructive about the origins of this noosphere (if we know how to look) is to see how gradually, by dint of being universally and lengthily prepared, the enormous event of its birth took place.

2. THE ORIGINAL FORMS

Man came silently into the world.

For a century or so, the scientific problem of the origin of man has been under discussion, and a swelling team of research workers has been digging feverishly into the past to discover the initial point of hominisation, and yet I cannot find a more expressive formula than this to sum up all our prehistoric knowledge. The more we find of fossil human remains and the better we understand their anatomic features and their succession in geological time, the more evident it becomes, by an unceasing convergence of all signs and proofs, that the human 'species', however unique the ontological position that reflection gave it, did not, at the moment of its advent, make any sweeping change in nature. Whether we consider the species in its environment, in the morphology of its stem, or in the global structure of its group, we see it emerge phyletically exactly *like any other species*.

Firstly, *in its environment*. As we know from palaeontology, an animal form never comes singly. It is sketched out in the heart of a verticil of neighbouring forms among which it takes shape, so to speak, gropingly. So it is with man. Regarded zoologically, man is today an almost isolated figure in nature. In his cradle he was less isolated. Nowadays there is no more room for doubt. Over a well-defined but immense area, extending from South Africa to Southern China and Malaya, amongst the rocks and the forest, at the end of the Tertiary period, the anthropoids were far more numerous than they are today.

Besides the gorilla, chimpanzee and orang-outang, now thrown back into their last strongholds like the Australian bushmen and the negrillos of our day, there was a whole population of other big primates, some of whom (the African *Australopithecus*, for instance) seem to have been far more hominoid than any alive today.

Secondly, *in the morphology of its stem*. With the multiplication of 'sister-forms', what indicates to the naturalist the origin of a living stem is a certain convergence of the axis of that stem with that of its neighbours. In the proximity of a knot, the leaves grow closer together. Not only is a species at its birth found bunched with others, but, like them it betrays much more clearly than in adult life its zoological parentage. The farther we follow an animal line back into the past, the more numerous and the more palpable are its 'primitive' features. Here too, man, on the whole, keeps strictly to the habitual phyletic mechanism. All we need is to try to arrange in a descending series *Pithecanthropus* and *Sinanthropus* after the Neanderthaloids below present-day man. Palaeontology does not often succeed in tracing so satisfying an alignment.

Thirdly, *in the structure of its group*. However well-defined the characters of a phylum may be, it is never found to be altogether simple, like a pure radiation. On the contrary, as far as we can follow it into the depths of its past, it manifests an internal tendency to cleavage and dispersion. Newly born, or even while *being born*, the species breaks up into varieties or sub-species. This is known to all naturalists. Keeping it in mind, let us take another look at man, man whose pre-history (even the most ancient) proves his congenital aptitude for ramification. Is it possible to deny that in the fan of the anthropoids he isolated himself—in this subject to the laws of all animate matter—as a fan of his own?

I was not exaggerating in the least. The more deeply science plumbs the past of our humanity, the more clearly does it see that humanity, *as a species*, conforms to the rhythm and the rules that marked each new offshoot on the tree of life before the

the same methods and with the same infelicities with which we began.

To you analyse the best government that a thing should happen in this or any other or so on walls-watching.

We have said that life, by its very nature, having once been lived on the stage of AWARENESS, can no longer continue presenting its scenes ever again.

This is enough for us to understand why the present world is the world of dissociation only.

The time is also there before us in the future, in which we may focus on neither, as these reflections not only neutralise but also annihilate.

The second is that we imagine, discover and search the boundaries of our nature, which need to study and to understand, finding in the direction in which the law passed by evolution, the law of the most rapid evolution.

more than enough of evolutionists—concentrating all their efforts on the study of the life of the planet and the possibility of species below it, which is the case being studied in the field of biology, which has so far been carried on at random, from which a famous case is the case of *homo sapiens*, which is the third edition of the species.

CHAPTER ONE

THE COLLECTIVE ISSUE

Preliminary Observation :

A Blind Alley to be Avoided : Isolation

WHEN MAN has realised that he carries the world's fortune in himself and that a limitless future stretches before him in which he cannot founder, his first reflex often leads him along the dangerous course of seeking fulfilment in isolation.

In one example of this—flattering to our private egotism—some innate instinct, justified by reflection, inclines us to think that to give ourselves full scope we must break away as far as possible from the crowd of *others*. Is it not in our aloofness from our fellows, or alternatively in their subjection to ourselves, that we will find that 'utmost limit of ourselves' which is our declared goal? The study of the past teaches us that, with the onset of reflection, an element partially liberated from phyletic servitudes began to live *for itself*. So is it not in a line continuous with that initial emancipation that further advance must lie? To be more *alone* so as to increase one's being. Like some radiating substance, mankind would in this case culminate in a dust of active, dissociated particles. This doubtless would not mean that a cluster of sparks would be extinguished in darkness, for that would involve the total death whose hypothesis we have just eliminated by our fundamental option. Rather it would involve the hope that, in the long run, some rays, more penetrating or luckier than others, would finish up by finding the path sought from the outset by consciousness, groping for

its consummation. Concentration by decentration from the rest ; solitary, and by dint of solitude the elements of the noosphere capable of being saved would find their salvation at the extreme limit of, and by the very excess of, their individualisation.

It is rare around us for extreme individualism to go beyond the bounds of a philosophy of immediate enjoyment and feel the need to come to terms with the profound requirements of action.

Less theoretical and less extreme, but all the more insidious, is another doctrine of 'progress by isolation' which, at this very moment, is fascinating large sections of mankind—the doctrine of the selection and election of races. Flattering to collective egotism, keener, nobler and more easily aroused than individual egotism, racialism has the virtue in its perspective of accepting and extending rigorously, just as they occur, the lines of the tree of life. What indeed does the history of the animate world show us but a succession of ramifications, springing up one after the other, one on the top of the other, through the success and domination of a privileged group ? And why should we be exempt from the general rule ? Why should there not be once again between us the struggle for life and the survival of the fittest ; the trial of strength ? The super-man should, like any other stem, be an offshoot from a single bud of mankind.

Isolation of the individual or isolation of the group : here we have two different forms of the same tactics, each seemingly able to produce a plausible justification by pointing to the methods pursued by life for its development right down to us.

We shall be seeing later wherein lies the attraction (or perversity) of these cynical and brutal theories in which, however, a noble passion may also stir. We shall also see why, faced with one or other of these calls to violence, we cannot help sometimes being deeply responsive. They involve a subtle deformation of a great truth.

What matters at the moment is to see clearly that those in both groups deceive themselves, and us too, inasmuch as, ignoring

an essential phenomenon—the 'natural confluence of grains of thought'—they disfigure or hide from our eyes the veritable contours of the noosphere and render biologically impossible the formation of a veritable spirit of the earth.

I. THE CONFLUENCE OF THOUGHT

A. Forced Coalescence

a. *Coalescence of Elements.* By their very nature, and at every level of complexity, the elements of the world are able to influence and mutually to penetrate each other by their *within*, so as to combine their 'radial energies' in 'bundles'. While no more than conjecturable in atoms and molecules, this psychic interpenetrability grows and becomes directly perceptible in the case of organised beings. Finally in man, in whom the effects of consciousness attain the present maximum found in nature, it reaches a high degree everywhere. It is written all over the social phenomenon and is, of course, felt by us directly. But at the same time, in this case also, it operates only in virtue of the 'tangential energies' of arrangement and thus under certain conditions of spatial juxtaposition.

And here there intervenes a fact, commonplace at first sight, but through which in reality there transpires one of the most fundamental characteristics of the cosmic structure—the roundness of the earth. The geometrical limitation of a star closed, like a gigantic molecule, upon itself. We have already regarded this as a necessary feature at the origin of the first synthesis and polymerisations on the early earth. Implicitly, without our having to say so, it has constantly sustained all the differentiations and all the progress of the biosphere. But what are we to say of its function in the noosphere ?

What would have become of humanity if, by some remote chance, it had been free to spread indefinitely on an unlimited surface, that is to say left only to the devices of its internal

affinities? Something unimaginable, certainly something altogether different from the modern world. Perhaps even nothing at all, when we think of the extreme importance of the role played in its development by the forces of compression.

Originally and for centuries there was no serious obstacle to the human waves expanding over the surface of the globe; probably this is one of the reasons explaining the slowness of their social evolution. Then, from the Neolithic age onwards, these waves began, as we have seen, to recoil upon themselves. All available space being occupied, the occupiers had to pack in tighter. That is how, step by step, through the simple multiplying effect of generations, we have come to constitute, as we do at present, an almost solid mass of hominised substance.

Now, to the degree that—under the effect of this pressure and thanks to their psychic permeability—the human elements infiltrated more and more into each other, their minds (mysterious coincidence) were mutually stimulated by proximity. And as though dilated upon themselves, they each extended little by little the radius of their influence upon this earth which, by the same token, shrank steadily. What in fact do we see happening in the modern paroxysm? It has been stated over and over again. Through the discovery yesterday of the railway, the motor car and the aeroplane, the physical influence of each man, formerly restricted to a few miles, now extends to hundreds of leagues or more. Better still: thanks to the prodigious biological event represented by the discovery of electro-magnetic waves, each individual finds himself henceforth (actively and passively) simultaneously present, over land and sea, in every corner of the earth.

Thus, not only through the constant increase in the numbers of its members, but also through the continual augmentation of their area of individual activity, mankind—forced to develop as it is in a confined area—has found itself relentlessly subjected to an intense pressure, a self-accentuating pressure, because each advance in it caused a corresponding expansion in each element.

That is one of the first facts to keep in mind, or we shall vitiate our picture of the future of the world.

Undeniably, quite apart from any hypothesis, the external play of cosmic forces, when combined with the nature—so prone to coalesce—of our thinking souls, operates towards a concentration of the energies of consciousness; and so powerful is this effort that it even succeeds in subjugating the very constructions of phylogeny—but we shall be coming to that presently.

b. *Coalescence of the Branches.* Twice already—once in developing the theory and once in outlining the historic phases of anthropogenesis—I called attention to the curious property, peculiar to human lines of descent, of coming into contact and mixing with each other, notably by means of their psychic sheath and social institutions. The moment has now come to make a general survey of the phenomenon and discover its ultimate significance.

What at first sight intrigues the naturalist when he tries to see the hominids—not merely in themselves, as anthropologists usually do, but in comparison with other animal forms—is the extraordinary elasticity of their zoological group. Outwardly in man, the anatomical differentiation of a primitive type pursues its course as everywhere in evolution. By genetic effects mutations are produced. By climatic and geographical influences, varieties and races come into existence. Somatically speaking, the 'fanning-out' is present continually in formation and perfectly recognisable. Yet the remarkable thing is that its divergent branches no longer succeed in separating. Under conditions of distribution which in any other initial phylum would have led long ago to the break up into different species, the human vertical as it spreads out remains entire, like a gigantic leaf whose veins, however distinct, remain always joined in a common tissue. With man we find indefinite interfecundation on every level, the blending of genes, anastomoses of races in civilisations or political bodies. Zoologically speaking, mankind offers us the unique spectacle of a 'species' capable of achieving something in which all previous species had failed. It.

has succeeded, not only in becoming cosmopolitan, but in stretching a single organised membrane over the earth without breaking it.

To what should we attribute this strange condition if not to a reversal, or more exactly a radical perfectioning, of the ways of life by the operation (at last, and only now possible) of a powerful instrument of evolution—the coalescence upon itself of an entire phylum?

Here again, at the base of the process, lies the exiguity of the earth on which the living stems are forced by their very growth to writhe and intertwine their living branches like serried shoots of ivy. But this external contact was and would always have remained insufficient to reach a point of conjunction without the new 'binder' conferred on the human biota by the birth of reflection. Until man came, the most life had managed to realise in the matter of association had been to gather socially together on themselves, one by one, the finer extremities of the same phylum. This resulted in essentially mechanical and family groups, created on a purely 'functional' impulse of construction, defence or propagation, such as the colony, the hive or the ant-heap—all organisms whose power of association is limited to the offspring of one single mother. From man onwards, thanks to the *universal* framework or support provided by thought, free rein is given to the forces of confluence. At the heart of this new *milieu*, the branches themselves of one and the same group succeed in uniting, or rather they become welded together even before they have managed to separate off.

In this way the differentiation of groups in the course of human phylogenesis is maintained up to a certain point, that is to say so far as—by gropingly creating new types—it is a biological condition of discovery and enrichment. After that (or at the same time)—as happens on a sphere where the meridians separate off at one pole only to come together at the other—this divergence gives place to, and becomes subordinate to, a movement of convergence in which races, peoples and nations consolidate one another and complete one another by mutual fecundation.

Anthropologically, ethnically, socially, morally, we understand nothing about man and can make no valid forecasts of his future, so long as we fail to see that, in his case, 'ramification' (in so far as it still persists) works only with the aim—and under higher forms—of agglomeration and convergence. Formation of verticils, selection, struggle for life—henceforward these are secondary functions, subordinate in man to a task of cohesion, a furling back upon itself of a 'bundle' of potential species around the surface of the earth, a completely new mode of phylogenesis.¹

B. *Mega-Synthesis*

The coalescence of elements and the coalescence of stems, the spherical geometry of the earth and psychical curvature of the mind harmonising to counterbalance the individual and collective forces of dispersion in the world and to impose unification—there at last we find the spring and secret of hominisation.

But why should there be unification in the world and what purpose does it serve?

To see the answer to this ultimate question, we have only to put side by side the two equations which have been gradually formulating themselves from the moment we began trying to situate the phenomenon of man in the world.

Evolution=Rise of consciousness,

Rise of consciousness=Union effected.

The general gathering together in which, by correlated actions of the *without* and the *within* of the earth, the totality of thinking units and thinking forces are engaged—the aggregation in a single block of a mankind whose fragments weld together and interpenetrate before our eyes in spite of (indeed in proportion to) their efforts to separate—all this becomes intelligible from top to bottom as soon as we perceive it as the natural culmination of a cosmic processus of organisation which has

¹ This is what I have called elsewhere 'the human Planetisation'.

never varied since those remote ages when our planet was young.

First the molecules of carbon compounds with their thousands of atoms symmetrically grouped ; next the cell which, within a very small volume, contains thousands of molecules linked in a complicated system ; then the metazoa in which the cell is no more than an almost infinitesimal element ; and later the manifold attempts made sporadically by the metazoa to enter into symbiosis and raise themselves to a higher biological condition.

And now, as a germination of planetary dimensions, comes the thinking layer which over its full extent develops and intertwines its fibres, not to confuse and neutralise them but to reinforce them in the living unity of a single tissue.

Really I can see no coherent, and therefore scientific, way of grouping this immense succession of facts but as a gigantic psycho-biological operation, a sort of *mega-synthesis*, the 'super-arrangement' to which all the thinking elements of the earth find themselves today individually and collectively subject.

Mega-synthesis in the tangential, and therefore and thereby a leap forward of the radial energies along the principal axis of evolution : ever more complexity and thus ever more consciousness. If that is what really happens, what more do we need to convince ourselves of the vital error hidden in the depths of any doctrine of isolation ? The egocentric ideal of a future reserved for those who have managed to attain egoistically the extremity of 'everyone for himself' is false and against nature. No element could move and grow except with and by all the others with itself.

Also false and against nature is the racial ideal of one branch draining off for itself alone all the sap of the tree and rising over the death of other branches. To reach the sun nothing less is required than the combined growth of the entire foliage.

The outcome of the world, the gates of the future, the entry into the super-human—these are not thrown open to a few of the privileged nor to one chosen people to the exclusion of all others. They will open only to an advance of *all together*, in a

direction in which *all together*¹ can join and find completion in a spiritual renovation of the earth, a renovation whose physical degree of reality we must now consider and whose outline we must make clearer.

2. THE SPIRIT OF THE EARTH

A. Mankind

Mankind : the idea of mankind was the first image in terms of which, at the very moment that he awoke to the idea of progress, modern man must have tried to reconcile the hopes of an unlimited future with which he could no longer dispense, with the perspective of the inevitability of his own unavoidable individual death. 'Mankind' was at first a vague entity, felt rather than thought out, in which an obscure feeling of perpetual growth was allied to a need for universal fraternity. Mankind was the object of a faith that was often naïve but whose magic, being stronger than all vicissitudes and criticisms, goes on working with persuasive force upon the present-day masses and on the 'intelligentsia' alike. Whether one takes part in the cult or makes fun of it, even today no-one can escape being haunted or even dominated by the idea of mankind.

In the eyes of the 'prophets' of the eighteenth century, the world appeared really as no more than a jumble of confused and loose relationships ; and the divination of a believer was required to feel the beating heart of that sort of embryo. Now, less than two hundred years later, here we are penetrating (though hardly conscious of the fact) into the reality, at any rate the material reality, of what our fathers expected. In the course of a few generations all sorts of economic and cultural links have been forged around us and they are multiplying in geometric progression. Nowadays, over and above the bread which to simple Neolithic man symbolised food, each man demands his

¹ Even if they do so only under the influence of a few, an élite.

the strange fact is that, in spite of the strength of these energies bringing men together, thinking units do not seem capable of falling within their radius of internal attraction. Leaving aside individual cases, where sexual forces or some extraordinary and transitory common passion come into play, men are hostile or at least closed to one another. Like a powder whose particles, however compressed, refuse to enter into molecular contact, deep down men exclude and repel one another with all their might : unless (and this is worse still) their mass forms in such a way that, instead of the expected *mind*, a new wave of determinism surges up—that is to say, of materiality.

Materialisation. Here I am not only thinking of the laws of large numbers which, irrespective of their secret ends, enslave by structure each newly-formed multitude. As with every other form of life, man, to become fully man, had to become legion. And, before becoming organised, a legion is necessarily prey to the play, however directed it be, of chance and probability. There are imponderable currents which, from fashion and rates of exchange to political and social revolutions, make us all the slaves of the obscure seethings of the human mass. However spiritualised we suppose its elements to be, every aggregate of consciousness, so long as it is not harmonised, envelops itself automatically (at its own level) with a veil of 'neo-matter', superimposed upon all other forms of matter—matter, the 'tangential' aspect of every living mass in course of unification. Of course we must react to such conditions ; but with the satisfaction of knowing that they are only the sign of and price paid for progress. But what are we to say of the other slavery, the one which gains ground in the world in very proportion to the efforts we make to organise ourselves ?

At no previous period of history has mankind been so well equipped nor made such efforts to reduce its multitudes to order. We have 'mass movements'—no longer the hordes streaming down from the forests of the north or the steppes of Asia, but 'the Million' scientifically assembled. The Million in rank and file on the parade ground ; the Million standardised in the

factory ; the Million motorised—and all this only ending up with Communism and National-Socialism and the most ghastly fetters. So we get the crystal instead of the cell ; the ant-hill instead of brotherhood. Instead of the upsurge of consciousness which we expected, it is mechanisation that seems to emerge inevitably from totalisation.

'Eppur si muove !'

In the presence of such a profound perversion of the rules of noogenesis, I hold that our reaction should be not one of despair but of a determination to re-examine ourselves. When an energy runs amok, the engineer, far from questioning the power itself, simply works out his calculations afresh to see how it can be brought better under control. Monstrous as it is, is not modern totalitarianism really the distortion of something magnificent, and thus quite near to the truth ? There can be no doubt of it : the great human machine is designed to work and *must* work—by producing a super-abundance of mind. If it does not work, or rather if it produces only matter, this means that it has gone into reverse.

Is it not possible that in our theories and in our acts we have neglected to give due place to the person and the forces of personalisation ?

I. THE CONVERGENCE OF THE PERSON AND THE OMEGA POINT

A. *The Personal Universe*

Unlike the primitives who gave a face to every moving thing, or the early Greeks who defined all the aspects and forces of nature, modern man is obsessed by the need to depersonalise (or impersonalise) all that he most admires. There are two reasons for this tendency, The first is *analysis*, that marvellous instrument of scientific research to which we owe all our advances but which, breaking down synthesis after synthesis, allows on

soul after another to escape, leaving us confronted with a pile of dismantled machinery, and evanescent particles. The second reason lies in the discovery of the sidereal world, so vast that it seems to do away with all proportion between our own being and the dimensions of the cosmos around us. Only one reality seems to survive and be capable of succeeding and spanning the infinitesimal and the immense: energy—that floating, universal entity from which all emerges and into which all falls back as into an ocean; energy, the new spirit; the new god. So, at the world's Omega, as at its Alpha, lies the Impersonal.

Under the influence of such impressions as these, it looks as though we have lost both respect for the person and understanding of his true nature. We end up by admitting that to be pivoted on oneself, to be able to say 'I', is the privilege (or rather the blemish) of the element in the measure to which the latter closes the door on all the rest and succeeds in setting himself up at the antipodes of the All. In the opposite direction we conceive the 'ego' to be diminishing and eliminating itself, with the trend to what is most real and most lasting in the world, namely the Collective and the Universal. Personality is seen as a specifically corpuscular and ephemeral property; a prison from which we must try to escape.

Intellectually, that is more or less where we stand today.

Yet if we try, as I have done in this essay, to pursue the logic and coherence of facts to the very end, we seem to be led to the precisely opposite view by the notions of space-time and evolution.

We have seen and admitted that evolution is an ascent towards consciousness. That is no longer contested even by the most materialistic, or at all events by the most agnostic of humanitarians. Therefore it should culminate forwards in some sort of supreme consciousness. But must not that consciousness, if it is to be supreme, contain in the highest degree what is the perfection of our consciousness—the illuminating involution of the being upon itself? It would manifestly be an error to extend the curve of hominisation in the direction of a state of diffusion.

It is only in the direction of hyper-reflection—that is to say, hyper-personalisation—that thought can extrapolate itself. Otherwise how could it garner our conquests which are all made in the field of what is reflected? At first sight we are disconcerted by the association of an Ego with what is the All. The utter disproportion of the two terms seems flagrant, almost laughable. That is because we have not sufficiently meditated upon the three-fold property possessed by every consciousness: (i) of centring *everything* partially upon itself; (ii) of being able to centre itself upon itself *constantly*; and (iii) of being brought *more* by this very super-centration *into association with all the other centres* surrounding it. Are we not at every instant living the experience of a universe whose immensity, by the play of our senses and our reason, is gathered up more and more simply in each one of us? And in the establishment now proceeding through science and the philosophies of a collective human *Weltanschauung* in which every one of us co-operates and participates, are we not experiencing the first symptoms of an aggregation of a still higher order, the birth of some single centre from the convergent beams of millions of elementary centres dispersed over the surface of the thinking earth?

All our difficulties and repulsions as regards the opposition between the All and the Person would be dissipated if only we understood that, by structure, the noosphere (and more generally the world) represent a whole that is not only closed but also centred. Because it contains and engenders consciousness, space-time is necessarily of a convergent nature. Accordingly its enormous layers, followed in the right direction, must somewhere ahead become involuted to a point which we might call *Omega*, which fuses and consumes them integrally in itself. However immense the sphere of the world may be, it only exists and is finally perceptible in the directions in which its radii meet—even if this were beyond time and space altogether. Better still: the more immense this sphere, the richer and deeper and hence the more conscious is the point at which the 'volume of being' that it embraces is concentrated; because the mind, seen from

our side, is essentially the power of synthesis and organisation.

Seen from this point of view, the universe, without losing any of its immensity and thus without suffering any anthropomorphism, begins to take shape : since to think it, undergo it and make it act, it is *beyond* our souls that we must look, *not the other way round*. In the perspective of a noogenesis, time and space become truly humanised—or rather super-humanised. Far from being mutually exclusive, the Universal and Personal (that is to say, the 'centred') grow in the same direction and culminate simultaneously in each other.

It is therefore a mistake to look for the extension of our being or of the noosphere in the Impersonal. The Future-Universal could not be anything else but the Hyper-Personal—at the Omega Point.

B. The Personalising Universe

Personalisation. It is by this internal deepening of consciousness upon itself that we have characterised (Book III, Chapter I, Section I) the particular destiny of the element that has become fully itself by crossing the threshold of reflection—and there, a regards the fate of individual human beings—we brought our inquiry to a provisional halt. *Personalisation* : the same type of progress reappears here, but this time it defines the collective future of totalised grains of thought. There is an identical function for the element as for the sum of the elements brought together in a synthesis. How can we conceive and foresee that the two movements harmonise ? How, without being impeded or deformed, can the innumerable particular curves be inscribed or even prolonged in their common envelope ?

The time has come to tackle this problem, and, for that purpose, to analyse still further the nature of the personal centre of convergence upon whose existence hangs the evolutionary equilibrium of the noosphere. What should this higher pole of evolution be, in order to fulfil its role ?

It is by definition in Omega that—in its flower and its integrity—the hoard of consciousness liberated little by little on earth by noogenesis adds itself together and concentrates. So much has already been accepted. But what exactly do we mean, what is implied, when we use the apparently simple phrase 'addition of consciousness' ?

When we listen to the disciples of Marx, we might think it was enough for mankind (for its growth and to justify the sacrifices imposed on us) to gather together the successive acquisitions we bequeath to it in dying—our ideas, our discoveries, our works of art, our example. Surely this imperishable treasure is the best part of our being.

Let us reflect a moment, and we shall soon see that for a universe which, by hypothesis, we admitted to be a 'collector and custodian of consciousness', the mere hoarding of these remains would be nothing but a colossal wastage. What passes from each of us into the mass of humanity by means of invention, education and diffusion of all sorts is admittedly of vital importance. I have sufficiently tried to stress its phyletic value and no one can accuse me of belittling it. But with that accepted, I am bound to admit that, in these contributions to the collectivity, far from transmitting the most precious, we are bequeathing, at the utmost, only the shadow of ourselves. Our works ? But even in the interest of life in general, what is the work of works for man if not to establish, in and by each one of us, an absolutely original centre in which the universe reflects itself in a unique and inimitable way ? And those centres are our very selves and personalities. The very centre of our consciousness, deeper than all its radii ; that is the essence which Omega, if it is to be truly Omega, must reclaim. And this essence is obviously not something of which we can dispossess ourselves for the benefit of others as we might give away a coat or pass on a torch. For we are the very flame of that torch. To communicate itself, my ego must subsist through abandoning itself or the gift will fade away. The conclusion is inevitable that the concentration of a conscious universe would be unthinkable if it did not reassemble in itself

all consciousnesses as well as all the conscious ; each particular consciousness remaining conscious of itself at the end of the operation, and even (this must absolutely be understood) each particular consciousness becoming still more itself and thus more clearly distinct from others the closer it gets to them in Omega.

The exaltation, not merely the conservation, of elements by convergence : what, after all, could be more simple, and more thoroughly in keeping with all we know ?

In any domain—whether it be the cells of a body, the members of a society or the elements of a spiritual synthesis—*union differentiates*. In every organised whole, the parts perfect themselves and fulfil themselves. Through neglect of this universal rule many a system of pantheism has led us astray to the cult of a great All in which individuals were supposed to be merged like a drop in the ocean or like a dissolving grain of salt. Applied to the case of the summation of consciousnesses, the law of union rids us of this perilous and recurrent illusion. No, following the confluent orbits of their centres, the grains of consciousness do not tend to lose their outlines and blend, but, on the contrary, to accentuate the depth and incommunicability of their *egos*. The more 'other' they become in conjunction, the more they find themselves as 'self'. How could it be otherwise since they are steeped in Omega? Could a centre dissolve? Or rather, would not its particular way of dissolving be to supercentralise itself?

Thus, under the influence of these two factors—the essential immiscibility of consciousnesses, and the natural mechanism of all unification—the only fashion in which we could correctly express the final state of a world undergoing psychical concentration would be as a system whose unity coincides with a paroxysm of harmonised complexity. Thus it would be mistaken to represent Omega to ourselves simply as a centre born of the fusion of elements which it collects, or annihilating them in itself. By its structure Omega, in its ultimate principle, can only be a distinct *Centre radiating at the core of a system of centres* ; a grouping in which personalisation of the All and personalisation

of the elements reach their maximum, simultaneously and without merging, under the influence of a supremely autonomous focus of union.¹ That is the only picture which emerges when we try to apply the notion of collectivity with remorseless logic to a granular whole of thoughts.

And at this point we begin to see the motives for the fervour and the impotence which accompany every egoistic solution of life. Egoism, whether personal or racial, is quite rightly excited by the idea of the element ascending through faithfulness to life, to the extremes of the incommunicable and the exclusive that it holds within it. It *feels* right. Its only mistake, but a fatal one, is to confuse *individuality with personality*. In trying to separate itself as much as possible from others, the element individualises itself ; but in doing so it becomes retrograde and seeks to drag the world backwards towards plurality and into matter. In fact it diminishes itself and loses itself. To be fully ourselves it is in the opposite direction, in the direction of convergence with all the rest, that we must advance—towards the 'other'. The peak of ourselves, the acme of our originality, is not our individuality but our person ; and according to the evolutionary structure of the world, we can only find our person by uniting together. There is no mind without synthesis. The same law holds good from top to bottom. The true ego grows in inverse proportion to 'egoism'. Like the Omega which attracts it, the element only becomes personal when it universalises itself.²

There is, however, an obvious and essential proviso to be made. For the human particles to become really personalised under the creative influence of union—according to the preceding analysis—not every kind of union will do. Since it is a question of achieving a synthesis of centres, it is centre to centre that they

¹ It is for this central focus, necessarily autonomous, that we shall henceforward reserve the expression 'Omega Point'.

² Conversely, it only universalises itself properly in becoming super-personal. There is all the difference (and ambiguity) between the true and the false political or religious mysticisms. By the latter man is destroyed ; by the former he is fulfilled by 'becoming lost in the greater than himself'.

must make contact and *not otherwise*. Thus, amongst the various forms of psychic inter-activity animating the noosphere, the energies we must identify, harness and develop before all others are those of an 'intercentric' nature, if we want to give effective help to the progress of evolution in ourselves.

Which brings us to the problem of love.

2. LOVE AS ENERGY

We are accustomed to consider (and with what a refinement of analysis!) only the sentimental face of love, the joy and miseries it causes us. It is in its natural dynamism and its evolutionary significance that I shall be dealing with it here, with a view to determining the ultimate phases of the phenomenon of man.

Considered in its full biological reality, love—that is to say, the affinity of being with being—is not peculiar to man. It is a general property of all life and as such it embraces, in its varieties and degrees, all the forms successively adopted by organised matter. In the mammals, so close to ourselves, it is easily recognised in its different modalities : sexual passion, parental instinct, social solidarity, etc. Farther off, that is to say lower down on the tree of life, analogies are more obscure until they become so faint as to be imperceptible. But this is the place to repeat what I said earlier when we were discussing the '*within* of things'. If there were no real internal propensity to unite, even at a prodigiously rudimentary level—indeed in the molecule itself—it would be physically impossible for love to appear higher up, with us, in 'hominised' form. By rights, to be certain of its presence in ourselves, we should assume its presence, at least in an inchoate form, in everything that is. And in fact if we look around us at the confluent ascent of consciousnesses, we see it is not lacking anywhere. Plato felt this and has immortalised the idea in his *Dialogues*. Later, with thinkers like Nicolas of Cusa, mediaeval philosophy returned technically to the same notion. Driven by the forces of love, the fragments of the world

seek each other so that the world may come to being. This is no metaphor ; and it is much more than poetry. Whether as a force or a curvature, the universal gravity of bodies, so striking to us, is merely the reverse or shadow of that which really moves nature. To perceive cosmic energy 'at the fount' we must, if there is a *within* of things, go down into the internal or radial zone of spiritual attractions.

Love in all its subtleties is nothing more, and nothing less, than the more or less direct trace marked on the heart of the element by the psychical convergence of the universe upon itself.

This, if I am not mistaken is the ray of light which will help us to see more clearly around us.

We are distressed and pained when we see modern attempts at human collectivisation ending up, contrary to our expectations and theoretical predictions, in a lowering and an enslavement of consciousnesses. But so far how have we gone about the business of unification ? A material situation to be defended ; a new industrial field to be opened up, better conditions for a social class or less favoured nations—those are the only and very mediocre grounds on which we have so far tried to get together. There is no cause to be surprised if, in the footsteps of animal societies, we become mechanised in the very play of association. Even in the supremely intellectual activity of science (at any rate as long as it remains purely speculative and abstract) the impact of our souls only operates obliquely and indirectly. Contact is still superficial, involving the danger of yet another servitude. Love alone is capable of uniting living beings in such a way as to complete and fulfil them, for it alone takes them and joins them by what is deepest in themselves. This is a fact of daily experience. At what moment do lovers come into the most complete possession of themselves if not when they say they are lost in each other ? In truth, does not love every instant achieve all around us, in the couple or the team, the magic feat, the feat reputed to be contradictory, of 'personalising' by totalising ? And if that is what it can achieve daily on a small scale, why should it not repeat this one day on world-wide dimensions ?

Mankind, the spirit of the earth, the synthesis of individual and peoples, the paradoxical conciliation of the element with the whole, and of unity with multitude—all these are called Utopian and yet they are biologically necessary. And for them to be incarnated in the world all we may well need is to imagine our power of loving developing until it embraces the total of men and of the earth.

It may be said that this is the precise point at which we are invoking the impossible. Man's capacity, it may seem, is confined to giving his affection to one human being or to very few. Beyond that radius the heart does not carry, and there is only room for cold justice and cold reason. To love all and everyone is a contradictory and false gesture which only leads in the end to loving no-one.

To that I would answer that if, as you claim, a universal love is impossible, how can we account for that irresistible instinct in our hearts which leads us towards unity whenever and in whatever direction our passions are stirred? A sense of the universe, a sense of the *all*, the nostalgia which seizes us when confronted by nature, beauty, music—these seem to be an expectation and awareness of a Great Presence. The 'mystics' and their commentators apart, how has psychology been able so consistently to ignore this fundamental vibration whose ring can be heard by every practised ear at the basis, or rather at the summit, of every great emotion? Resonance to the All—the keynote of pure poetry and pure religion. Once again: what does this phenomenon, which is born with thought and grows with it, reveal if not a deep accord between two realities which seek each other; the severed particle which trembles at the approach of 'the rest'?

We are often inclined to think that we have exhausted the various natural forms of love with a man's love for his wife, his children, his friends and to a certain extent for his country. Yet precisely the most fundamental form of passion is missing from this list, the one which, under the pressure of an involuting universe, precipitates the elements one upon the other in the

Whole—cosmic affinity and hence cosmic sense. A universal love is not only psychologically possible; it is the only complete and final way in which we are able to love.

But, with this point made, how are we to explain the appearance all around us of mounting repulsion and hatred? If such a strong potentiality is besieging us from within and urging us to union, what is it waiting for to pass from potentiality to action? Just this, no doubt: that we should overcome the 'anti-personalist' complex which paralyses us, and make up our minds to accept the possibility, indeed the reality, of some *source* of love and *object* of love at the summit of the world above our heads. So long as it absorbs or appears to absorb the person, collectivity kills the love that is trying to come to birth. As such collectivity is essentially unlovable. That is where philanthropic systems break down. Common sense is right. It is impossible to give oneself to an anonymous number. But if the universe ahead of us assumes a face and a heart, and so to speak personifies itself,¹ then in the atmosphere created by this focus the elemental attraction will immediately blossom. Then, no doubt, under the heightened pressure of an infolding world, the formidable energies of attraction, still dormant between human molecules, will burst forth.

The discoveries of the last hundred years, with their unitary perspectives, have brought a new and decisive impetus to our sense of the world, to our sense of the earth, and to our human sense. Hence the rise of modern pantheism. But this impetus will only end by plunging us back into super-matter unless it leads us towards someone.

For the failure that threatens us to be turned into success, for the concurrence of human monads to come about, it is necessary and sufficient for us that we should extend our science to its farthest limits and recognise and accept (as being necessary to close and balance space-time) not only some vague future

¹ Not, of course, by becoming a person, but by charging itself at the very heart of its development with the dominating and unifying influence of a focus of personal energies and attractions.

existence, but also, as I must now stress, the radiation *as a present reality* of that mysterious centre of our centres which I have called Omega.

3. THE ATTRIBUTES OF THE OMEGA POINT

After allowing itself to be captivated in excess by the charms of analysis to the extent of falling into illusion, modern thought is at last getting used once more to the idea of the creative value of synthesis in evolution. It is beginning to see that there is definitely *more* in the molecule than in the atom, *more* in the cell than in the molecule, *more* in society than in the individual, and *more* in mathematical construction than in calculations and theorems. We are now inclined to admit that at each further degree of combination *something* which is irreducible to isolated elements *emerges* in a new order. And with this admission, consciousness, life and thought are on the threshold of acquiring a right to existence in terms of science. But science is nevertheless still far from recognising that this *something* has a particular value of independence and solidity. For, born of an incredible conourse of chances on a precariously assembled edifice, and failing to create any measurable increase of energy by their advent, are not these 'creatures of synthesis', from the experimental point of view, the most beautiful as well as the most fragile of things? How could they anticipate or survive the ephemeral union of particles on which their souls have alighted? So in the end, in spite of a half-hearted conversion to spiritual views, it is still on the *elementary* side—that is, towards matter infinitely diluted—that physics and biology look to find the eternal and the Great Stability.

In conformity with this state of mind the idea that some Soul of souls should be developing at the summit of the world is not as strange as might be thought from the present-day views of human reason. After all, is there any other way in which our

thought can generalise the Principle of Emergence?¹ At the same time, as this Soul coincides with a supremely improbable coincidence of the totality of elements and causes, it remains understood or implied that it could not form itself save at an extremely distant future and in a total dependence on the reversible laws of energy.

Yet it is precisely from these two restrictions (fragility and distance), both incompatible to my mind with the nature and function of Omega, that we want to rid ourselves—and this for two positive reasons, one of love, the other of survival.

First of all the *reason of Love*. Expressed in terms of internal energy, the cosmic function of Omega consists in initiating and maintaining within its radius the unanimity of the world's 'reflective' particles. But how could it exercise this action were it not in some sort loving and lovable *at this very moment*? Love, I said, dies in contact with the impersonal and the anonymous. With equal infallibility it becomes impoverished with remoteness in space—and still more, much more, with difference in time. For love to be possible there must be co-existence. Accordingly, however marvellous its foreseen figure, Omega could never even so much as equilibrate the play of human attractions and repulsions if it did not act with equal force, that is to say with the same stuff of proximity. With love, as with every other sort of energy, it is within the existing datum that the lines of force must at every instant come together. Neither an ideal centre, nor a potential centre could possibly suffice. A present and real noosphere goes with a real and present centre. To be supremely attractive, Omega must be supremely present.

In addition, the *reason of survival*. To ward off the threat of disappearance, incompatible with the mechanism of reflective activity, man tries to bring together in an ever vaster and more permanent subject the collective principle of his acquisitions—civilisation, humanity, the spirit of the earth. Associated in these enormous entities, with their incredibly slow rhythm of evolu-

¹ See the quotation from J. B. S. Haldane in footnote p. 57.

tion, he has the impression of having escaped from the destructive action of time.¹

But by doing this he has only pushed back the problem. For after all, however large the radius traced within time and space, does the circle ever embrace anything but the perishable? So long as our constructions rest with all their weight on the earth, they will vanish with the earth. The radical defect in all forms of belief in progress, as they are expressed in positivist creeds, is that they do not definitely eliminate death. What is the use of detecting a focus of any sort in the van of evolution if that focus can and must one day disintegrate? To satisfy the ultimate requirements of our action, Omega must be independent of the collapse of the forces with which evolution is woven.

Actuality, irreversibility. There is only one way in which our minds can integrate into a coherent picture of noogenesis these two essential properties of the autonomous centre of all centres, and that is to resume and complement our Principle of Emergence. In the light of our experience it is abundantly clear that emergence *in the course of evolution* can only happen successively and with mechanical dependence on what preceded it. First the grouping of the elements; then the manifestation of 'soul' whose operation only betrays, from the point of view of energy, a more and more complex and sublimated involution of the powers transmitted by the chains of elements. The radial function of the tangential: a pyramid whose apex is supported from below: that is what we see during the course of the process. And it is in the very same way that Omega itself is discovered to us at the end of the whole processus, inasmuch as in it the movement of synthesis culminates. Yet we must be careful to note that under this evolutive facet Omega still only reveals *half of itself*. While being the last term of its series, it is also *outside all series*. Not only does it crown, but it closes. Otherwise the sum would fall short of itself, in organic contradiction with the whole operation. When, going beyond the elements, we

¹ See for example that curious book by Wells, *The Anatomy of Frustration*, which eloquently bears witness to the faith and the misgivings of modern man.

come to speak of the conscious Pole of the world, it is not enough to say that it *emerges* from the rise of consciousnesses: we must add that from this genesis it has already *emerged*; without which it could neither subjugate into love nor fix in incorruptibility. If by its very nature it did not escape from the time and space which it gathers together, it would not be Omega.

Autonomy, actuality, irreversibility, and thus finally transcendence are the four attributes of Omega. In this way we round off without difficulty the scheme left incomplete at the end of our second chapter, where we sought to enclose the energy-complex of our universe.

In Omega we have in the first place the principle we needed to explain both the persistent march of things towards greater consciousness, and the paradoxical solidity of what is most fragile. Contrary to the appearances still admitted by physics, the Great Stability is not at the bottom in the infra-elementary sphere, but at the top in the ultra-synthetic sphere. It is thus entirely by its tangential envelope that the world goes on dissipating itself in a chance way into matter. By its radial nucleus it finds its shape and its natural consistency in gravitating against the tide of probability towards a divine focus of mind which draws it onward.

Thus something in the cosmos escapes from entropy, and does so more and more.

During immense periods in the course of evolution, the radial, obscurely stirred up by the action of the *Prime Mover ahead*, was only able to express itself, in diffuse aggregates, in animal consciousness. And at that stage, not being able, above them, to attach themselves to a support whose order of simplicity was greater than their own, the nuclei were hardly formed before they began to disaggregate. But as soon as, through reflection, a type of unity appeared no longer closed or even centred, but punctiform, the sublime physics of centres came into play. When they became centres, and therefore persons, the elements could at last begin to react, directly as such, to the personalising action of the centre of centres. When consciousness broke through the

critical surface of hominisation, it really passed from divergence to convergence and changed, so to speak, both hemisphere and pole. Below that critical 'equator' lay the relapse into multiplicity ; above it, the plunge into growing and irreversible unification. Once formed, a reflective centre can no longer change except by involution upon itself. To outward appearance, admittedly, man disintegrated just like any animal. But here and there we find an inverse function of the phenomenon. By death, in the animal, the radial is reabsorbed into the tangential, while in man it escapes and is liberated from it. It escapes from entropy by turning back to Omega : the *hominisation* of death itself.

Thus from the grains of thought forming the veritable and indestructable atoms of its stuff, the universe—a well-defined universe in the outcome—goes on building itself above our heads in the inverse direction of matter which vanishes. The universe is a collector and conservator, not of mechanical energy, as we supposed, but of persons. All round us, one by one, like a continual exhalation, 'souls' break away, carrying upwards their incommunicable load of consciousness. One by one, yet not in isolation. Since, for each of them, by the very nature of Omega, there can only be one possible point of definitive emersion—that point at which, under the synthesising action of personalising union, the noosphere (furling its elements upon themselves as it too furls upon itself) will reach collectively its point of convergence—at the 'end of the world'.

CHAPTER THREE

THE ULTIMATE EARTH

WE HAVE seen that without the involution of matter upon itself, that is to say, without the closed chemistry of molecules, cells and phyletic branches, there would never have been either biosphere or noosphere. In their advent and their development, life and thought are not only accidentally, but also structurally, bound up with the contours and destiny of the terrestrial mass.

But, on the other hand, we now see ahead of us a psychical centre of universal drift, transcending time and space and thus essentially extra-planetary, to sustain and equilibrate the surge of consciousnesses.

The idea is that of noogenesis ascending irreversibly towards Omega through the strictly limited cycle of a geogenesis. At a given moment in the future, under some influence exerted by one or the other of these curves or of both together, it is inevitable that the two branches should separate. However convergent it be, evolution cannot attain to fulfilment on earth except through a point of dissociation.

With this we are introduced to a fantastic and inevitable event which now begins to take shape in our perspective, the event which comes nearer with every day that passes : the end of all life on our globe, the death of the planet, the ultimate phase of the phenomenon of man.

No one would dare to picture to himself what the noosphere will be like in its final guise, no one, that is, who has glimpsed however faintly the incredible potential of unexpectedness accumulated in the spirit of the earth. The end of the world defies imagination. But if it would be absurd to try to describe

But have those who still hesitate in this way really understood the rigorous and salutary conditions imposed on our reason by the coherence of the universe, now admitted by all ? A mark appearing on a film ; an electroscope discharging abnormally ; that is enough to force physics to accept fantastic powers in the atom. Similarly, if we try to bring man, body and soul, within the framework of what is experimental, man obliges us to readjust completely to his measure the layers of time and space.

To make room for thought in the world, I have needed to 'interiorise' matter : to imagine an energetics of the mind ; to conceive a noogenesis rising upstream against the flow of entropy ; to provide evolution with a direction, a line of advance and critical points ; and finally to make all things double back upon *someone*.

In this arrangement of values I may have gone astray at many points. It is up to others to try to do better. My one hope is that I have made the reader feel both the reality, difficulty, and urgency of the problem and, at the same time, the scale and the form which the solution cannot escape.

The only universe capable of containing the human person is an irreversibly 'personalising' universe.

EPILOGUE

THE CHRISTIAN PHENOMENON

NEITHER IN the play of its elemental activities, which can only be set in motion by the hope of an 'imperishable' ; nor in the play of its collective affinities, which require for their coalescence the action of a conquering love, can reflective life continue to function and to progress unless, above it, there is a pole which is supreme in attraction and consistence. By its very structure the noosphere could not close itself either individually or socially in any way save under the influence of the centre we have called Omega.

That is the postulate to which we have been led logically by the integral application to man of the experimental laws of evolution. The possible, or even the probable, repercussion of this conclusion, however theoretical in the first approximation, upon experience will now be obvious.

If Omega were only a remote and ideal focus destined to emerge at the end of time from the convergence of terrestrial consciousnesses, nothing could make it known to us but this convergence. At the present time no other energy of a personal nature could be detected on earth save that represented by the sum of human persons.

If, on the other hand, Omega is, as we have admitted, *already in existence* and operative at the very core of the thinking mass, then it would seem inevitable that its existence should be manifested to us here and now through some traces. To animate evolution in its lower stages, the conscious pole of the world could of course only act in an impersonal form and under the

veil of biology. Upon the thinking entity that we have become by hominisation, it is now possible for it to radiate from the one centre to all centres—*personally*. Would it seem likely that it should not do so?

Either the whole construction of the world presented here is vain ideology or, somewhere around us, in one form or another, some excess of personal, extra-human energy should be perceptible to us if we look carefully, and should reveal to us the great Presence. It is at this point that we see the importance for science of the *Christian phenomenon*.

At the conclusion of a study of the *human phenomenon* I have not chosen those words haphazardly, nor for the sake of mere verbal symmetry. They are meant to define without ambiguity the spirit in which I want to speak.

As I am living at the heart of the Christian world, I might be suspected of wanting to introduce an *apologia* by artifice. But, here again, so far as it is possible for a man to separate in himself the various planes of knowledge, it is not the convinced believer but the naturalist who is asking for a hearing.

The Christian fact stands before us. It has its place among the other realities of the world.

I would like to show how it seems to me to bring to the perspectives of a universe dominated by energies of a personal nature the crucial confirmation we are in need of, firstly by the substance of its creed, next, by its existence-value, and finally by its extraordinary power of growth.

I. AXES OF BELIEF

To those who only know it outwardly, Christianity seems desperately intricate. In reality, taken in its main lines, it contains an extremely simple and astonishingly bold solution of the world.

In the centre, so glaring as to be disconcerting, is the uncom-

promising affirmation of a personal God : God as providence, directing the universe with loving, watchful care ; and God the revealer, communicating himself to man on the level of and through the ways of intelligence. It will be easy for me, after all I have said, to demonstrate the value and actuality of this tenacious personalism, not long since condemned as obsolete. The important thing to point out here is the way in which such an attitude in the hearts of the faithful leaves the door open to, and is easily allied to, everything that is great and healthy in the universal.

In its Judaic phase, Christianity might well have considered itself the particular religion of one people. Later on, coming under the general conditions of human knowledge, it came to think that the world around it was much too small. However that may be, it was hardly constituted before it was ceaselessly trying to englobe in its constructions and conquests the totality of the system that it managed to picture to itself.

Personalism and universalism : in what form have these two characters been able to unite in its theology ?

For reasons of practical convenience and perhaps also of intellectual timidity, the City of God is too often described in pious works in conventional and purely moral terms. God and the world he governs are seen as a vast association, essentially legalistic in its nature, conceived in terms of a family or government. The fundamental root from which the sap of Christianity has risen from the beginning and is nourished, is quite otherwise. Led astray by a false evangelism, people often think they are honouring Christianity when they reduce it to a sort of gentle philanthropism. Those who fail to see in it the most realistic and at the same time the most cosmic of beliefs and hopes, completely fail to understand its 'mysteries'. Is the Kingdom of God a big family ? Yes, in a sense it is. But in another sense it is a prodigious biological operation—that of the Redeeming Incarnation.

As early as in St. Paul and St. John we read that to create, to fulfil and to purify the world is, for God, to unify it by uniting it

organically with himself.¹ How does he unify it ? By partially immersing himself in things, by becoming 'element', and then, from this point of vantage in the heart of matter, assuming the control and leadership of what we now call evolution. Christ, principle of universal vitality because sprung up as man among men, put himself in the position (maintained ever since) to subdue under himself, to purify, to direct and superanimate the general ascent of consciousnesses into which he inserted himself. By a perennial act of communion and sublimation, he aggregates to himself the total psychism of the earth. And when he has gathered everything together and transformed everything, he will close in upon himself and his conquests, thereby rejoining, in a final gesture, the divine focus he has never left. Then, as St. Paul tells us, *God shall be all in all*. This is indeed a superior form of 'pantheism'² without trace of the poison of adulteration or annihilation : the expectation of perfect unity, steeped in which each element will reach its consummation at the same time as the universe.

The universe fulfilling itself in a synthesis of centres in perfect conformity with the laws of union. God, the Centre of centres. In that final vision the Christian dogma culminates. And so exactly, so perfectly does this coincide with the Omega Point that doubtless I should never have ventured to envisage the latter or formulate the hypothesis rationally if, in my consciousness as a believer, I had not found not only its speculative model but also its living reality.

2. EXISTENCE VALUE

It is relatively easy to build up a theory of the world. But it is beyond the powers of an individual to provoke artificially the

¹ Following Greek thought—following all thought in fact—are not 'to be' and 'to be one' identical?

² 'En pάσι pάντα Θεός.'

birth of a religion. Plato, Spinoza and Hegel were able to elaborate views which compete in amplitude with the perspectives of the Incarnation. Yet none of these metaphysical systems advanced beyond the limits of an ideology. Each in turn has perhaps brought light to men's minds, but without ever succeeding in begetting life. What to the eyes of a 'naturalist' comprises the importance and the enigma of the Christian phenomenon is its existence-value and reality-value.

Christianity is in the first place real by virtue of the spontaneous amplitude of the movement it has managed to create in mankind. It addresses itself to every man and to every class of man, and from the start it took its place as one of the most vigorous and fruitful currents the noosphere has ever known. Whether we adhere to it or break off from it, we are surely obliged to admit that its stamp and its enduring influence are apparent in every corner of the earth today.

It is doubtless a quantitative value of life if measured by its radius of action; but it is still more a qualitative value which expresses itself—like all biological progress—by the appearance of a specifically new state of consciousness.

I am thinking here of Christian love.

Christian love is incomprehensible to those who have not experienced it. That the infinite and the intangible can be lovable, or that the human heart can beat with genuine charity for a fellow-being, seems impossible to many people I know—in fact almost monstrous. But whether it be founded on an illusion or not, how can we doubt that such a sentiment exists, and even in great intensity ? We have only to note crudely the results it produces unceasingly all round us. Is it not a positive fact that thousands of mystics, for twenty centuries, have drawn from its flame a passionate fervour that outstrips by far in brightness and purity the urge and devotion of any human love ? is it not also a fact that, having once experienced it, further thousands of men and women are daily renouncing every other ambition and every other joy save that of abandoning themselves to it and labouring within it more and more completely ?

Lastly, is it not a fact, as I can warrant, that if the love of God were extinguished in the souls of the faithful, the enormous edifice of rites, of hierarchy and of doctrines that comprise the Church would instantly revert to the dust from which it rose ?

It is a phenomenon of capital importance for the science of man that, over an appreciable region of the earth, a zone of thought has appeared and grown in which a genuine universal love has not only been conceived and preached, but has also been shown to be psychologically possible and operative in practice. It is all the more capital inasmuch as, far from decreasing, the movement seems to wish to gain still greater speed and intensity.

3. POWER OF GROWTH

For almost all the ancient religions, the renewal of cosmic outlook characterising 'the modern mind' has occasioned a crisis of such severity that, if they have not yet been killed by it, it is plain they will never recover. Narrowly bound to untenable myths, or steeped in a pessimistic and passive mysticism, they can adjust themselves neither to the precise immensities, nor to the constructive requirements, of space-time. They are out of step both with our science and with our activity.

But under the shock which is rapidly causing its rivals to disappear, Christianity, which might at first have been thought to be shaken too, is showing, on the contrary, every sign of forging ahead. For, by the very fact of the new dimensions assumed by the universe as we see it today, it reveals itself both as inherently more vigorous in itself and as more necessary to the world than it has ever been before.

More vigorous. To live and develop the Christian outlook needs an atmosphere of greatness and of coherence. The bigger the world becomes and the more organic become its internal connections, the more will the perspectives of the Incarnation

triumph. That is what believers are beginning, much to their surprise, to find out. Though frightened for a moment by evolution, the Christian now perceives that what it offers him is nothing but a magnificent means of feeling more at one with God and of giving himself more to him. In a pluralistic and static Nature, the universal domination of Christ could, strictly speaking, still be regarded as an extrinsic and super-imposed power. In a spiritually converging world this 'Christic' energy acquires an urgency and intensity of another order altogether. If the world is convergent and if Christ occupies its centre, then the Christogenesis of St. Paul and St. John is nothing else and nothing less than the extension, both awaited and unlooked for, of that noogenesis in which cosmogenesis—as regards our experience—culminates. Christ invests himself organically with the very majesty of his creation. And it is in no way metaphorical to say that man finds himself capable of experiencing and discovering his God in the whole length, breadth and depth of the world in movement. To be able to say literally to God that one loves him, not only with all one's body, all one's heart and all one's soul, but with every fibre of the unifying universe—that is a prayer that can only be made in space-time.

More necessary. To say of Christianity that, despite appearances to the contrary, it is acclimatising itself and expanding in a world enormously enlarged by science, is to point to no more than one half of the picture. Evolution has come to infuse new blood, so to speak, into the perspectives and aspirations of Christianity. In return, is not the Christian faith destined, is it not preparing, to save and even to take the place of evolution ?

I have tried to show that we can hope for no progress on earth without the primacy and triumph of the *personal* at the summit of *mind*. And at the present moment Christianity is the *unique* current of thought, on the entire surface of the noosphere, which is sufficiently audacious and sufficiently progressive to lay hold of the world, at the level of effectual practice, in an embrace, at once already complete, yet capable of indefinite

perfection, where faith and hope reach their fulfilment in love. *Alone*, unconditionally alone, in the world today, Christianity shows itself able to reconcile, in a single living act, the All and the Person. *Alone*, it can bend our hearts not only to the service of that tremendous movement of the world which bears us along, but beyond, to embrace that movement in love.

In other words can we not say that Christianity fulfils all the conditions we are entitled to expect from a religion of the future ; and that hence, through it, the principal axis of evolution truly passes, as it maintains ?

Now let us sum up the situation :

- i. Considered objectively as a phenomenon, the Christian movement, through its rootedness in the past and ceaseless developments, exhibits the characteristics of a *phylum*.
- ii. Reset in an evolution interpreted as an ascent of consciousness, this phylum, in its trend towards a synthesis based on love, progresses precisely in the direction presumed for the leading-shoot of biogenesis.
- iii. In the impetus which guides and sustains its advance, this rising shoot implies essentially *the consciousness of being in actual relationship with a spiritual and transcendent pole of universal convergence*.

To confirm the presence at the summit of the world of what we have called the Omega Point,¹ do we not find here the very cross-check we were waiting for ? Here surely is the ray of sunshine striking through the clouds, the reflection onto what is ascending of that which is already on high, the rupture of our solitude. The palpable influence on our world of *an other* and supreme Someone . . . Is not the Christian phenomenon, which

¹ To be more exact, ' to confirm the presence at the summit of the world of something in line with, but still more elevated than, the Omega point '. This is in deference to the theological concept of the 'supernatural' according to which the binding contact between God and the world, *hic et nunc* inchoate, attains to a super-intimacy (hence also a super-gratuitousness) of which man can have no inkling and to which he can lay no claim by virtue of his ' nature ' alone.

rises upwards at the heart of the social phenomenon, precisely that ?

In the presence of such perfection in coincidence, even if I were not a Christian but only a man of science, I think I would ask myself this question.

Peking, June 1938-June 1940