MAN AND THE UNIVERSE

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PREFACE

THIS book was not written for philosophers or scientists —not, that is, in the last analysis, for my colleagues, but for all who care to be presented with a picture of the universe, complete and having a scientific foundation. This term has a twofold meaning. It means (1) that this book makes use of every kind of knowledge having a scientific basis, and (2) that we state quite exactly where knowledge ceases and conjecture begins.

Accordingly, this book is not a confession of faith, like my essay in Ethics called *Die Sittliche Tat*; or, at any rate, it is so only where this is expressly stated, as in the final section, which is devoted to Ethics.

It would have been easy to write a confession of my view of the universe, but such a book would have been of little value, for confessions of this kind are all too common. Those who will to believe may stay within the sphere of religious orthodoxies, all of which are irrefutable by science—a fact which, of course, does not prove their validity. My chief concern was to separate knowledge from mere assumption (or even belief), for in this way alone it is possible to set up a view of the world which can outlast the bare present.

Accordingly my book does full justice to science, and my philosophy is not blind to its results. I know that the latter quality is unfashionable, and that in these days there are many who desire to disregard science and give the name of philosophy only to the product of other sources of knowledge—immediate intuitions of the nature of reality or the like. I cannot persuade myself that such sources exist. On the other hand, I take the concept of

science in the whole of its fullness and multiplicity; and it seems to me that the modern contempt for science is due to the fact that its champions take the concept in too narrow a sense, namely, as denoting a mechanistic view of the world.

Others say that science is no more than a particular, although comprehensive, form of world-contemplation—the "intellectual" form, and that there are other forms, or, as the popular expression goes, standpoints as well.

This is not my own view. I hold that (1) in so far as we are dealing with real knowledge at all, there is only one standpoint with regard to the world, and only one form in which it can be apprehended, which is, precisely, Knowledge, or Intellect; (2) this intellectual form is far from exhausting itself in the mechanistic world-picture; and (3) (this is connected with (2)) the mechanistic world-view does not comprehend the whole of the world under one definite "point of view", but comprehends one part only of the world under that point of view which alone is adequate to it. Thus *knowledge* is for me the only point of view which will comprehend the world. It is true that this knowledge further develops into a number of systems having different structures in accordance with the different parts of the world which I make my object. But it is one thing to consider different parts of a whole under one point of view, namely, that of knowledge, and evidently quite a different matter to contemplate a whole under different points of view. The second method gives us a multiple, or at any rate a dual world-view, while the result of the first is simple.

To speak in a more concrete manner, man cannot be considered "first" exclusively as a mechanical system,

"secondly" exclusively as an organic living being, "thirdly" exclusively as a Soul, and "fourthly" exclusively as a social-ethical entity, as though these were different methods of contemplation applied in turn to the same object. Rather, man is one extremely complex structure, in which one part (soul, spirit, life) enters into contact with the other (material) part. Our task is to determine the nature of the contact; and here the popular view, that man consists simply of body and soul, is much nearer to the truth than are many of the statements of philosophers who hold the "point-of-view" theory.

My work gives to man a definite position in the cosmos; it does not treat spirit as something alien to nature; spirit is that which penetrates nature. In many respects it resembles the work of Dacqué, although I pitch my claims less high. Civilization in its more particular manifestations plays a small part with both of us, if I rightly apprehend Dacqué; the fact that man is human is alone important for us.

It may be said that my view of the world betrays the fact that its author was at one time a natural scientist, who attacks every problem like a problem in natural science; but I would consider such an objection not as blame but as praise. For the true method of natural science is *the* method of knowledge in general, and bears the name of natural only because among the empirical sciences the schemes of nature were the first which reflected on the meaning of knowledge and the way in which contents of knowledge are acquired. It goes without saying that results which natural science has acquired in one field of knowledge (the inorganic, for example) must not be applied dogmatically to other parts: each part of

the world must be investigated separately and without bias. But the "method" is everywhere the same: to apprehend the form in which the subject-matter is ordered.

It may be admissible to call my method "rational", if that be desired; but then the term must not be used in the sense of a universally comprehensive mechanistic form, which fails in practice as soon as it is applied to the organic world. What I call the rational method is capable also of mastering that which is popularly called occult or mystical, or even magical; everything, that is, which belongs to the realm of Psychical Research, both in its animistic and in its spiritistic form, and to astrology. The actual data and the method of dealing with them are purely questions of fact of a scientific kind. To master these things in the rational manner means, precisely, to determine the order which pervades them and the facts which they represent. It is true that this does not give complete understanding; but we cannot "understand" even the laws of impact. Nothing can be understood completely. It is one of the tasks of rationalism to determine where the limits of understanding begin; and beyond there is no instrument of knowledge in the strict sense.

Mortal man must recognize this and be satisfied. He may use faith to complement what he knows; but such additions should not be called knowledge.

HANS DRIESCH

LEIPSIC,
12th February, 1928

PREFATORY NOTE

In the form of this book my complete philosophical system presents itself to the English-speaking reader for the first time, at least on a larger scale. My London Lectures of 1924, published under the title *The Possibility of Metaphysics*, give nothing but what might be called the skeleton of parts of my system, and this in a very condensed form.

This book may be taken as an introduction to my larger works, and it is my hope that the reader may use it in this way.

My thanks are due to the publishers, Messrs. George Allen & Unwin Ltd., and to Mr. W. H. Johnston, B.A., who has made the translation in quite an excellent way. I know well that this has not been a very easy task.

HANS DRIESCH

Leipsic,
17*th June*, 1929

TRANSLATOR'S NOTE

PHILOSOPHY is the quintessence of common sense, and it should therefore be possible to render a philosophical work in the language of every day. I have made this my aim, but have been prevented from achieving it completely by the fact that Philosophy, like every other science, has its peculiar technical terms. To substitute more familiar words for them would involve inaccuracy, and to circumscribe them whenever they occur, clumsiness. I have been compelled by these considerations to use a number of technical terms in the body of the text, and I have drawn up the following list of them for the use of those readers who may wish to consult it:—

A priori.—Knowledge of which the truth, and propositions of which the certainty, is evident without the corroboration of facts are said to be true, or certain, *a priori*—mathematical and logical truths are of this kind.

Contingent.—Existing facts or events are said to be contingent if there is no essential reason discoverable why they should not be different from what they are.

Critique.—A critical examination, or systematic analysis, of a problem or subject, always from an impartial standpoint, and therefore not necessarily adverse. It is in this sense that Kant composed his three Critiques, which constitute the bulk of his teaching: The Critique of Pure Reason, the Critique of Practical Reason, and the Critique of Judgment.

Determinism.—That view of the world which holds that the whole course of events is rigidly fixed, or *determined*, beforehand.

Dualism.—That view of the nature of reality which holds that it is essentially, or ultimately, twofold, consisting of spirit and also of matter, or again of good and evil.

Empirical.—Knowledge the truth of which is apprehended,

not *a priori*, but through experience, is said to be empirical.

Entelechy.—Driesch employs this term to denote the controlling, but immaterial and non-physical, principle of all Life and all organisms. This theory is the essence of his own "Vitalism".

Entity.—I have used *entity* to denote anything that exists, whether materially or spiritually, and that, grammatically, can be the subject of a sentence.

Image.—The mental picture of an external object which passes through the mind during the process of *imagination* is called its image.

Intuit.—I have used *intuit* to mean: to apprehend, as *e.g.* by vision or by any other of the senses.

Posit, to.—To assert or maintain, or definitely express.

Sensuous.—When an object is experienced through the senses the experience is called a *sensuous* experience.

Subjective; Objective.—That which experiences (the self or ego) is called the subject, as opposed to that which it experiences, which is called the object. *Subjective* and *objective* are the corresponding adjectives.

World as it is, the.—An expression essential to Kant's philosophy. From one standpoint (he modified this at a later period) he held that we percieve through our senses a world of appearance; behind these experiences, and causing them, he held *the world as it is* to lie; more generally, therefore, the term means ultimate or absolute Reality.

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A.—THE APPREHENSION OF THE UNIVERSE

I. THE NATURAL WORLD-PICTURE

NATURAL man is convinced that there is a world, and that he can know this world to a certain extent in its true essence. It is quite indifferent whether this "natural" man is a Negro of Central Africa or a modern inhabitant of Western Europe, or even whether we imagine in his place a Roman peasant of the period of Augustus. The only requisite is that the man in question shall be "natural"; he must never have reflected on the fact that he has a world before him, nor have wondered whether he apprehends it in fact as it "really" is.

He may entertain as many religious and superstitious ideas as he will, so long as they do not touch these points. He knows that he does not know the whole of the world. Why should there not be regions in the world which he does not know at all, like those of the heavens, for example, which are inhabited by the gods? This kind of limitation of knowledge is wholly different from that which can emerge from the question whether I have in fact apprehended the world as it is "in itself". Man ceases to be natural only when he begins to reflect upon this question.

We do not know what is the attitude of a baby to the world, and, indeed, we cannot know it. For a grown-up does not recollect the first year of his life; and in the years which he does recollect (even if in rare cases these may include the second year) he already possessed some slight knowledge of the world; at any rate, he knew that there

is a world. On the other hand, a baby cannot express itself in a manner which allows a certain view to be formed about its view of the world. So far as any view can be framed at all—that is, in some cases, as early as the second month—it would appear that a world does exist for the child.

Now what constitutes the "world" for the natural man of every kind?

It includes many things existing in space. These things are different from one another, and the same thing is different at different times, although it is the "same" thing. The exact meaning of this is not further discussed. Certainly the lake yonder is the same lake, whether it is calm and smooth or lashed by the gale; and the dog is the same dog, whether it is running about or sleeping. Accordingly, things can change. But this only means that their properties change; the things remain the same; this much is known even to a native of New Guinea.

Further, things can act on one another; thus a stone thrown by me can move another stone, can wound an animal, or cause waves in water. I myself, too, can be a cause if I will it, and this goes quite without saying; I understand it perfectly.

That I exist in this my world during the day is certain: I see it, and can feel, smell, taste, and hear it. But there are also times when I sleep. Then I am there no longer, and the world too is there no longer. At least this is usually the case—usually, but not invariably. For sometimes I am "there" when I sleep: only then it is quite a different world from the world of the day in which I move.

Now as natural man I have observed another thing, of which we have not yet spoken. This world manifests

a certain regularity of which I take advantage when I wish to act in a certain manner. Of the same things—of trees, stones, fishes—there are in existence innumerable specimens, and they always behave in the same manner: all birds can fly, and dogs never, and if I succeed in hitting an animal hard it is "always" wounded. But, strangely enough, in the world which I sometimes inhabit in sleep, the case is different. There a dog may fly, a bird may speak (which otherwise is peculiar to man) and the stones may rebound from the animal without wounding it. And there are even creatures which I have never seen elsewhere. Could I have entered a new world during sleep without knowing it? Yet if I go to another village I always know it. They are strange things, these nightly experiences!

Let us now assume that our natural man is of really acute intelligence; in that case he may carry his observations a little farther. He will then reflect thus: "There are things quite different from those which are experienced in sleep, which obviously do not relate so immediately to the world in which I live during the day. If I rest a little on a hot afternoon, then, too, I have experience of curious shapes and curious events, which are not the same as those which I see and hear when I am afield. And these shapes and events are rather similar to those which I have often seen and heard in sleep. But I know that I was not properly asleep yesterday when I saw them, for I could hear the children shouting outside.

"And, further, I can 'see' my house even when I am in the forest: all I have to do is to 'think' of my house. Then I see my house, and yet do not properly 'see' it. What does that mean? What does it mean if now, when

I am perfectly awake, I can see the village—where I sold my fish yesterday—that I know that I was there yesterday, while certainly I am not there now?"

In this way natural man discovers his inner life as opposed to the world of perception. He knows now that he can "remember" something, and that he can even "think" of something without a clear mental image. In this way there really are two worlds—only, one of them has its origin in him and is his private world.

And now, if our natural man happens to be rather artful, he will begin to reflect a little upon the experiences which he has during certain nights or during his noonday rest. He has noticed that he always has these experiences *alone*. His friends and relations sometimes have similar experiences, but never quite the same; and if they have these similar experiences, they have them at different times. But village, wood, and sea, as they *really* exist, are always seen by all simultaneously. Perhaps then there is a certain relation between images of recollection, images during afternoon rest, and the experiences of certain nights. In this way our natural man may come to extend and complete his inner life by adding to it, under the name of *dreams*, the strange experiences of certain nights and of his noonday rest.

In some cases he may not feel perfectly confident. Once, for instance, a neighbour saw in a dream something which did really happen exactly three weeks later. And another—one afternoon, while he was resting, but was not really yet asleep—heard the voice of his mother, who lives a full day's journey away, and at that very hour the mother had died. It is hardly surprising then if our friend begins to wonder if his view is right that the inner

life has its origin in him and is private to him. It is not likely, of course, that he will give up his idea that he possesses an inner life, having its origin in him; for he can observe every day that there is such a thing as memory and a life of imagination. But it does become a pretty difficult question for him to say where mere inner life begins and where it ends; and dreams, whether of the night or of the day, always remain rather questionable. Apart from his inner life, our natural man has discovered another fact, namely, that he is related to his own body in quite a different way from that in which he is related to the bodies of his fellow-men. He knows that he can apprehend certain properties of things (namely, taste-properties) only if he brings the things into immediate contact with certain parts of his body, which is unnecessary for sight, hearing, and smell. And he also knows that every kind of pain is always due to something in his body.

Now he comprehends under the one word "I" all that concerns his body and his inner life, without further reflecting upon this little word: "I" am this body with this volition and this inner life, and these faculties, etc. But *you* are also what I am, and therefore I call each one of you "you." And we all have for counterpart the world facing us.

I know quite exactly the meaning of the word "I"; and more especially I know the meaning of: "I will something and proceed to do it". And all the rest of you know it too, and will and act. Not so, of course, the stones, or the rain and the clouds. How then is it possible for them to move, or, indeed, to be there at all? No doubt this has been effected by somebody whom we do not know, somebody who must certainly be similar to us, for we

too can make a good many things, such as tents or arrows. Only *he* is surely much more powerful than we. For he can do many things which we cannot do; only the other day he overthrew a whole house by the wind he caused to blow. A man of might: grand, but often rather terrible. If only we could get on the right side of him. Perhaps he will listen to our requests, and perhaps it will be well if we give him something to eat. No doubt there are many such men of might whom we do not see. Perhaps they fight each other: the other day the rain was driven away by the sun. We must get on the right side of all of them.

Is it perhaps some such man who makes our dreams? Did he perhaps tell my neighbour the other day what did not happen until later? Are there, perhaps, men who are much nearer to him than I happen to be?

A dreadful thing—the other day he killed a man in our village. I have heard that men die, and that warriors kill one another. I did not quite believe it, but now I have seen it. The man had been quite weak for some time and moved only a little. But yesterday he did not move at all: he was quite cold and had such a curious look. Soon after he began to smell horribly, and was quickly put under the earth. If only the Mighty One will kill no more men—my father, my mother, or even—myself. Perhaps one ought to offer him a man, or at least an animal, freely, in order to pacify him. For clearly he is angry with us—very angry. And he is much more cruel than were my father or my teachers when I had done something which was forbidden, which I ought not to have done.

And what is the meaning of those two expressions: I *ought* not to do a thing, and I may be *dead* some day?

Is it perhaps the case that I ought to do or not to do certain things, not because they have been forbidden by my father or my teacher, but never at all, even when they can never know of it? It would seem so; my "inner" part, which I know already, seems to tell me so. In that case surely one of the Mighty Ones is speaking to me. I must ask those who are nearer to him than I am.

To die. *Where* is my dead neighbour now? He must be somewhere. His body is under the earth; I saw myself how they put him in. But that was not the whole of him; something was missing, and what has become of that? Is it with him, and if not, where is it? And, finally, *what* is it?

There must be some part of the world which we do not see at all; no doubt our neighbour is there now, and perhaps the Mighty Ones live there too—and perhaps we ourselves are there when we dream—in that otherwise unknown part of the world. And, indeed, a few days after my neighbour died my sister saw him quite clearly in her sleep: and then he was not dead.

In this way, then, the natural man completes his view of the world.

It begins with the apprehension of the actual world "as it is"; there is here no room for doubt. There follows the segregation of the inner life and of the individual body; the formula is now "*I* and the world", the *I* being here taken in a very general and vague manner, being taken, nevertheless, as the standard for all things and as the starting-point of every activity and happening. With the arrival of the Mighty and Terrible (the two always go together) the apprehension of the world has already reached its end. Dream and day-dream have prepared the

way for the creation of a Beyond. Death corroborates its existence, and at the same time Gods and ethical feeling arise.

This much applies to every natural man, even if we have expressed ourselves in terms which point to a "primitive" type. It was not our intention to produce a treatise on ethnology: we have merely tried to express what would also apply to modern Europeans if we imagine a community of them exiled on a desert island before education and instruction had begun for them.

II. THE BEGINNING OF CRITICISM AND ITS METHOD

We now can cross a gap at one bound and use a terminology which is fully adequate to our civilization.

Accordingly, we assume now that it is known that behind every event there is not always hidden an anthropomorphic action, or, ultimately, an anthropomorphic will. There is a sharp distinction between living and non-living. A good many natural laws are known. Moral consciousness is clearly expressed and the concept of godhead is developed. It is true that many questions are questions still, the most important of them being the question about death. There also remains the idea of a world of the "beyond" which cannot be experienced immediately. But all this still begins from the naïve conviction that "this" world is apprehended *as it is*.

1. Error as the Father of Doubt

Here the first profound turn in the apprehension of the world takes place; the conviction that the world is apprehended as it is in itself, is shaken, and this is brought about by clear consciousness of the phenomenon of *error*.

Natural man too, of course, has been in error, and has been aware of the fact; but he paid no great attention to his awareness of his error, he made no "question" or "problem" of it; for him it was "natural".

One evening a hunter went into a wood. He saw a man sitting in the distance and redoubled his precaution, for after all it might be an enemy, and perhaps there were more enemies in ambush. He went on cautiously, and in a few minutes he saw that the man was a tree-trunk of peculiar shape. "I see", he thinks, and quietly goes on.

But that man who was the first not to say "I see" and to go on quietly, but who said instead, "How strange that it is possible to be deluded", laid the first foundation of what was later called the theory of cognition. For every theory or "critique" of cognition grew out of error.

The formula now is, "Here I was in error, here my senses were deceived—reality was different from what I thought. Are there perhaps other ways in which I could be in error? Must I not feel 'doubt' in many other things which hitherto I took for certain?"

Thus doubt is born of error, and with it there appears a new stage in the relation between man and the universe.

And doubt proceeds to conquer fresh fields.

A man has been busy about the stove, and then comes into the living-room; he finds it cold in there. Soon after he is busy outside in the wind and the rain; he enters the living-room, and finds it pleasantly warm. His mother, on the other hand, who was in the room all the time, tells him that it is heated now in the same way as before. What then is "real"? Is his mother right? In that case he would have been in a state of delusion—and that twice, and in different directions.

Again, one day, late in the afternoon, our friend went from the bright meadow into the dense wood: it was so dark that he had difficulty in distinguishing the different trees and bushes. He sat down tired for a while and closed his eyes; when he opened them again it was quite light in the wood, light enough for him to distinguish everything. Meanwhile the sun had been sinking and was giving less light. How light was it "really" in the wood?

Nowadays we give the name of phenomena of "Contrast" to these events, and in order to be rid of them we determine the "temperature" of a room, not by "subjective feelings", but by means of a thermometer which has no "feeling"; and we also possess appropriate apparatus to measure brightness.

"Subjective" and "objective"—this is the problem.

We know that our man discovered his inner life while he was still entirely "natural"; for a long time he has been distinguishing between perceptions and images of memory and imagination, and is a little uncertain in his interpretation only of dreams and of half-dreams. But there is a new and confusing element in delusions of the senses and in Contrasts.

Our natural man was pleased enough to have effected a distinction between external experience and inner life. But now they seem to be together again and somehow to interpenetrate. Has his inner life been playing him a trick? Has it interfered with his perceptions and introduced error into them? He thought that he was seeing a certain object, a man, where in fact there was another object, a tree-trunk; and he thought that there was a difference where in fact there had been no variation, as in

the case of warmth and brightness. Perhaps, after all, both these errors had their origin "*in*" him.

Perhaps many more things have their origin in him. He knows already that the reality of warmth and brightness is suspect. Colours, again, are curious: one day, when he had been looking for a long time at the red and setting sun, everything was green afterwards where it had been white before, although it soon became white again. What was its "real" colour?

Clearly many things *are* different from what I *apprehend* them to be. Could it be that everything, or at any rate a very great part of the world, is "in itself" different from what I judge it to be? In that case the world would not be as I imagine it to be: I would be cut off from the "beyond", and besides, my own familiar world would be mocking me. I cannot, of course, doubt that it *is* there; but perhaps it is not *in itself* such as I imagine it to be. Perhaps in reality things have properties different from those under the guise of which they offer themselves to my senses; and the cause of this might be, precisely, the fact that they present themselves to *me*, to me with the experience, the senses, and the moods which are peculiar to me. It is sure that on many occasions a man *has* been sitting in the wood. I *thought* that there was one there on that particular occasion, for, after all, that was quite possible; and it may have been that I was a little frightened in the gloomy wood. And if I thought the room on one occasion to be warm and on the other to be cold, when in fact it was at the same temperature, then the reason of this might be the fact that I was "accustomed" to warmth the first time when I came from the stove, and the second time, when I came out of the rain and the wind, to cold.

2. What is Real?

At this point the physicists and philosophers arrive. In the beginning they are generally united in one and the same person.

They tell our friend that the world (apart from any possible Beyond, the existence of which some of them deny altogether) is in fact quite different "in itself" from the "appearance" which it presents to us.

When, however, the question is reached what is its nature "in itself", then opinions differ greatly among them, especially among the "philosophers".

Some, and with them the pure physicists, tell us that this world "really" consists of "matter", and that matter is divided into very small parts, which they call atoms.

In order to form a mental picture of these, we have only to think of any rigid body which is capable of giving or receiving impact; only the idea of rigidity, 'solidity', and of resistance must be intensified into infinity.

According to them form and rigidity are the true *primary*, that is real, properties of things, while all those which in ordinary life we call properties, warmth, colour, sounds, smells, are only *secondary* or "subjective" forms in which the real world appears to us because we have a certain soul and a certain body. If a spark lights in a barrel of gunpowder an explosion results; if atoms "stimulate" my eye, the experience of a coloured image results. In each result there are two elements, first the cause, and secondly the peculiarity of the recipient element; this is equally true of the explosion and of the perception.

The real world is thus a huge structure of atoms, and

we know the laws by which these atoms act upon one another.

Now one subordinate group of these "natural philosophers" tells us that this is all that is essential. Consciousness is, for them, merely an additional detail in the world—for its existence cannot well be denied, since that would be self-negation. But the important element is matter, and therefore these people are called *Materialists*. For according to them all the processes of the life of the body and of the organism can be explained as the interplay of atoms, or, as they call it, "on mechanical lines".

But there is also a more cautious group among those who teach the doctrine of primary and secondary qualities. These, too, assert that our colours, sounds, and smells are only "appearances", and they are based upon the real world of material atoms. But perhaps other forces are active in this world besides the mechanical ones. Perhaps there are controlling forces of a higher kind, for example in the sphere of the organic; the soul perhaps is such a force.

This is the doctrine of the atomistic natural philosophers, whether they are "mechanists" or "vitalists"; this point will not concern us until later.

The other main group of philosophers also takes the world to be appearance, but does not operate with the rigid atoms, whether these be subordinated to merely mechanical, or to controlling, soul-like forces. They say that our world is appearance of the "spirit" without giving a detailed explanation of their meaning. But precisely because they can give no account of details, and cannot "explain" them, they appeal only to romantic and not to scientific minds. Their so-called "idealism" becomes

fruitful only when it is allied to the results of exact and analytic philosophy; and this, as we shall see, can very well take place.

The first main group of our thinkers, to whom we now revert, can point to numerous scientific discoveries; it is a fact that sounds are created in us by vibrations of the air, that is, by something mechanical, and it is extremely probable that what we call heat is caused by movements of the atoms of the "hot" object; and they have other claims as well.

Now in the course of time the concept of "matter", and especially that of "atom", is defined more and more clearly; the law of action is formulated with mathematical exactness, and the concept of "energy", that is, the power of doing "work", is introduced as standard.

The "primary" qualities were not really quite as simple as was thought at first. Newton already added action at a distance to bare impact. At a later period Maxwell showed that strict "mechanics" were untenable as applied to electricity. Everything ends in the establishment of systems of equations stating the relations between different energies in different points of space.

Everything is vastly simplified, especially in our days, when Chemistry becomes a part of Physics, and two kinds only of elements are admitted—electrons and protons—while the old ninety odd species of atoms which chemistry employed are recognized to be mere combinations of these.

Thus "in reality" there are (1) distributions of energy in space, and (2) the laws which govern their equilibrium, whether special vital forces are added to the physical forces or not.

But this is far from being all that the so-called theory of

cognition tells us, for at this point the Real still remains in space.

Meanwhile, however, Kant has come (and before him Leibniz and Berkeley), and has told us that what we call space, and even that what we call time, are "merely subjective". Thus temporal and spatial properties, which hitherto were counted as "primary", that is, as real properties, become secondary, like sounds, warmths, and colours.

And even the abstract concepts which we use to grasp the world, like "thing", "number", "cause", are "subjective" additions, and their origin lies in us.

The world in its entirety is "appearance"—but of what? We are told that a reality, an "in itself", lies behind it. But what *is* this reality, and what is its nature? We do not know. To use Kant's expression, the Real is a mere "X" which compels us to form our perceptions into a picture of the world in a certain definite manner, and not capriciously.

But even Kant "never doubted for a moment" that there *is* a reality.

3. Unanswered Questions

But *ought* he not to have suspected that this might be the case at the extremely advanced "subjective" standpoint which he had reached? Nothing whatever of the world-picture of the natural man has survived, since space and time, besides number, things, and properties and the rest, have been abstracted from it. Everything is like a well-ordered dream and no more. How did Kant ever reach his knowledge that this world, which has been completely emptied (and even this is too much, since not

even a space or a time has been allowed to survive), has the "existence" of anything for foundation—an "existence" which means anything more than that this world is being experienced by me—exactly as in a dream?

We know that the natural man at first had difficulty in distinguishing accurately between outer and inner world; indeed, his tendency at first was to take everything for outer world. Now, on the other hand, we are really reduced to an inner world, a world of experience—although the assertion is made of it that it is the appearance of an "existing" world—that is, of an outer world in the most general sense of the term.

It may well be asked what is the meaning of "cognition" at this standpoint. "Cognition" in the common acceptance of the term postulates something that is not ego, but is apprehended by the ego as *other*; cognition is "true" if I apprehend the other as it is. But here there is no "other" to be apprehended, for what I call world exists for me alone.

Indeed, all modern disciples of Kant have plenty of trouble over the concept of cognition. At bottom they retain only the word and give it a new meaning; they say that I have "cognition" of the world when I apprehend *my* world (that is the appearance of a mere *X*) in the form in which it appears in a non-contradictory manner. This, as we shall see, is not bad, only it should not be called cognition. For all that we have here is an extremely personal apprehension of my personal property.

Now it is true that most of Kant's disciples do not feel quite happy with their doctrine—the master himself did not feel quite happy with it. So they resort to smuggling in a metaphysical term called "universal

validity". It is said that reality consists of the totality of all true assertions, or, more strictly, of all true judgments; and true judgments are *valid* for "everybody", or for "consciousness in general". What, however, can be the meaning of this if the world in general exists only as my wholly personal and dreamlike experience, for myself? "Consciousness in general" might mean an absolute metaphysical entity. But to admit this would be to bring to the ground the whole of the so-called critical structure, on the erection of which so much trouble had been spent. Or, alternatively, "consciousness in general" means simply "all sane people", that is, "everybody". But how do I know that this "everybody" exists at all? For the world has opposed to it only one wholly personal subject which apprehends it, namely, myself; and all the "everybodies", that is, all the other men, are, for me, "objects", that is, objects for me in this world of ordered dream.

Here it will not do to fall back suddenly to a naïve standpoint and to pretend that the existence of many "I's", that is, of many subjects, goes without saying. For in that case "criticism" would have left uncriticized precisely the most important point, although with Kant and his followers this quite obviously was and still is the case.

III. THE CORRECTED WORLD-PICTURE

1. The True "Critical" Starting-Point

Let us for once take "criticism" completely seriously and carry it to the bitter end. This is quite feasible, as I have tried to show in my *Ordnungslehre*.

We question everything that it is possible to question.

It is true that certain significant structures, like logical and mathematical truths (e.g. the proposition $2 \times 2 = 4$), cannot be questioned once they have been understood. But all that has to do with facts can be questioned, and especially the assertion that there *is* a reality existing in itself; for, as far as its content is concerned, all experience might be no more than my ordered dream. Thus at the outset we do not even know of the existence of that unknown as alone which Kant called *X*, and still less do we know any things which affect our senses, although Kant in certain passages of his work boldly speaks of such, thereby contradicting other and deeper passages. Still less do we speak of the "universal validity" of certain "judgments".

Faced by this most universal and ruthless form of Doubt, there still remains one fact among all the rest, as was seen already by Augustine and Descartes (whose names we gratefully remember), namely, the stubborn fact that *I consciously experience something.*

For, if I were to "doubt" this too, then I would be "experiencing", since doubt *is* a form of experience, a *modus cogitandi*, to use the expression of Descartes, who employs the word *cogitare*, which literally means to think, in a very broad manner.

This fact that I experience we will call "the fundamental fact", for clearly it is quite a different matter from what is normally called a fact. Indeed, it is the necessary condition of all other facts.

We do not, of course, assert that the "I" exists as a separate entity, still less that it exists in an indestructible form. So far we know nothing of this—indeed, the question at this point is meaningless for us. All that we know

and say is, that the fact that *I experience* something exists, and does so for that part of itself which is called "I", and cannot possibly be separated from it.

Least of all do we say that my world is a "product" of the I, that it is "made" by the I—a view which was eventually, of course, reached by Kant, although with certain somewhat vague restrictions. Nor are there even any special regions of our world in which we speak of "subjective" additions to the "objective". "I experience something"—and that is all.

Further, that which is experienced is not the "content" of the I or of so-called consciousness. The ego is no vessel. We may, if we wish, call the something which I experience *object*, for in a manner it is placed over against me; but this too is no more than a metaphor.

2. The Apprehension of the Order of "My" World

I have, then, the "something" before me; I experience it. And I now experience immediately that it is extremely manifold in itself, but nevertheless manifests a certain order. *Order*, then, is the next thing which we require in order to be able to set to work. What does *Order* mean? I know it, but I cannot explain or define it.

Still I *do* know it: I know it as I know the meaning of "conscious experience", which I am equally unable to explain or to define. And for this very reason, because I know the meaning of "order". I now have my task, which is also the first task for the whole of philosophy and of knowledge, namely, to reach a perfectly clear idea of *that wherein consists* the order of the something which I experience, that is, the order of "my" wholly personal world, which may or may not be a dream.

I study the order of my world. This, at any rate, is the first part of so-called philosophy.

I do not say "There is only my world". At the beginning I do not know whether "there is" anything or not, nor do I even raise that question. I do not so much as know the meaning of such a question.

But *my* world does exist, and exists in any event, in so far as it is *my* world. Let me then proceed to investigate what exists in any event. What is its order? We must carry this task to a finish, and then see if "there is" anything besides.

Is not this an idle game? Is it not like the minute analysis of a dream? Perhaps; we shall see. In any case, if it would carefully examine itself, it is the first act of which any philosophy is capable at all, if it is truly "critical", that is, if it gives a really exhaustive account of itself.

We said that I study "the order of my world". Now what is the difference between this "study" of order and simple and plain "experience" of order, which after all must surely precede study? It is not altogether a simple matter to give a complete explanation of this, and in this work we say about it only what follows. To study order means to fasten our attention upon experience quite consciously and expressly, and, so to speak, after the event; it means to "reflect" upon that which is experienced and its forms. Study, too, is a form of experience, but an experience expressly in the service of order. The technical terminology of philosophy here says that what was hitherto merely experienced is now *posited* or *comprehended* when it is reflected upon in this manner; the experience becomes *concept*, or is *posited*. But that which is *merely* experienced differs from that which is posited because the latter operates expressly within the sphere of

ordering activity. Thus the pursuit of logic becomes a particularly developed form of experiencing; and it is seen how the doctrine of order grows out of plain experience and is within the reach of every man who confines his reflections to his experiences.

In this sense the Doctrine of Order can, in fact, yield as much as philosophy has yielded hitherto, in so far as it is not metaphysics.[1] The objects of the so-called separate sciences, too (the word being taken in its widest meaning), are, at bottom, its objects. For the sciences are nothing other than separate and independent branches on the great tree called philosophy. It is true that often they appear to have lost all practical contact with philosophy; but at any time they can join the parent tree again if they are willing to reflect upon the ultimate foundations of their knowledge, and consider the position which they hold in the whole scheme. For it is a characteristic of philosophy, as it is taken by the Doctrine of Order, that it never loses sight of the ordered totality of knowledge.

It is surely self-evident that so-called logic in the narrower meaning of the term, and mathematics, can be pursued within the sphere of our wholly personal Doctrine of Order.

Suppose that I analyse the meaning of "All men are mortal; negroes are men; therefore negroes are mortal"; if then I study the so-called composite conclusion, or "syllogism", in the most general manner, that is, if I ask myself what conditions must always be fulfilled in order that a third proposition shall follow from two given

[1] Those who desire to have a thorough and perfectly rigorous treatment or the questions discussed in this, the preceding, and the following paragraphs, are referred to my *Ordnungslehre* (Second Edition, 1923), and my *Wissen und Denken* (Second Edition, 1922).

propositions, then clearly I am dealing only with meanings and the relations between meanings which I experience consciously and quite immediately, so far as their "sense" is concerned; that is, which quite evidently fall within the scope of our fundamental fact *I experience something.* And the same applies to the whole of mathematics, including geometry; "triangle", too, is a meaning, a "sense", and no more. These are mere concepts, if we wish to use the customary term, albeit in a somewhat wide sense.

3. The Apprehension of the Order of Nature and Especially of the Soul

But it is possible also to pursue all the sciences of Nature and of culture, as well as psychology, æsthetics, and ethics, as so many studies of *order.*

It is true that here the meanings or concepts are not immediately before me, as is the case with investigations of numbers and of geometrical structures. But I "behold" now—to use a metaphor for a fact which at bottom is indescribable—that there is a great and good order in "my world" when I say that certain of my experiences—all dreams, feelings, and thoughts—are indeed *merely* private to me, while some of my "intuitive" experiences (which I call perceptions) look as though they pointed to something, or *meant* something which has a kind of independent existence. Let me then act *as though* this something did exist independently for itself.

For example, I "see" a dog, that is, to put it quite strictly, I experience the seen perception-image of a dog. This is still an immediate experience. But now I say that this image *means* a dog as an object, which, *as it were,* is

independent, and "is there" even when I do not see it. This introduces a great measure of order into the totality of my experience, which otherwise must remain rather chaotic and incoherent.

Anyone to whom this still sounds rather obscure should make the following reflections:—

Let him put himself into a contemplative mood; let him think, for example, that he is taking a half-hour's rest during the afternoon. Innumerable things "pass through" his mind—images of recollections, feelings, wishes, and thoughts. But this is not all: a car passes rattling, a dog barks, and perhaps there is a sudden flash of lightning. The first set of events he will call his inner experiences, the second his sensations or perceptions. And as a rule (we shall pursue this later) he knows quite well what he must classify under the first and what under the second set of experiences. He will say that the second set has its origin outside, or in "nature".

This is our opinion too, only we make quite certain of what this really means. And now we observe that at this point, at least, *all* the experiences which we have been describing (the noise of the car and the barking of the dog) equally are just experiences. If we were to consider them *only* as such, a great confusion would arise in the process of my experiencing; order is introduced into my experience just because I say that *some* of my experiences are due to the fact that objects in what is, *as it were*, an independent external world act upon me.

Ultimately this is a very complicated reflection, although every man makes it almost instinctively soon after birth. It is only the philosopher who consciously returns to the origin of all experience, and finally under-

stands *what* is meant by the expressions "outer world" and "nature".

In this way I reach the concept of Nature—a totality of objects each of which is unique and behaves *as though* it existed in an independent manner. Julius Cæsar and Beethoven's "Ninth Symphony" are such unique and, as it were, independent objects; but so also is every stone and every block of wood.

To such an object I will give the name of *object of experience*, or, *empirical object*. It still remains a part of my world, for we only regard it *as though* it were independent in its uniqueness. This is enough. We do not speak of a "real" existence, of an existence "in itself"—not yet, at any rate.

We mean here that which in ordinary life we call a "thing", and, in connection therewith, an "event", a "happening". The characteristic of all these things is, that each one of them is reckoned as unique, as existing for itself; that, at any rate, they are looked upon *as though* each in its uniqueness existed for itself. Empirical objects are thus something quite different from those "objects" with which mathematics, and especially geometry, concerns itself. The latter investigates "*the* sphere", "*the* parabola"; while natural science investigates this *one definite sphere*, this *one definite parabola*—in which, for example, a comet moves.

Thus, apart from empirical objects, which are immediately before us (whether they are "intuitive" or, like numbers, "meanings"), we have created a second stratum of objects, in which we now discover a great order. *It is just a fact* that, in other words, the content of our experience permits of the creation of the concept of the empirically

real object. We do not here ask any further questions about it.

It is sometimes difficult to say when an immediate experience, even when it is "intuitive", can be *allowed* to "mean" or "indicate" a natural object. The experience itself does not proclaim this. There are occasions, for example at the moment when we are falling asleep, when we are in doubt whether we are already asleep or still awake, and many people, especially artists, experience very vivid "objects" which nevertheless are just products of their imagination. It is true that we generally have sufficient certainty, unless we suffer from hallucinations or from an abnormally active imagination. But it is exceedingly difficult to define exactly when an immediate intuitive experience can be *allowed* to signal or "mean" an empirical object. A good part of the so-called theory of cognition has laboured upon this problem—under a false name, for the task is not to understand absolute reality, but only to order my world.

In general we may say that any intuitive empirical object, for example a small lake, in so far as it is "seen", may be *allowed* to count as the index of a natural object (that is, as "Perception" proper), when this latter object takes a harmonious place in the knowledge which we already have of Nature. It is true that this statement must be applied cautiously, for after all there *might* be something new and quite unknown; but with caution it may well be applied. Thus, if I see a certain image in the desert and "take" it for a lake, and find as I approach it that the "lake" remains at a fixed distance, then I say that I have been deceived by a mirage. For I have no acquaintance with lakes which run away, and I have no

reason for assuming that I am faced by something "new" for I am quite capable of accounting for it in a satisfactory manner. This also shows that the popular saying that the consensus of many affords a standard for the empirical reality of the object in a given case may fail us, for at first everybody takes the "lake" in the desert for a lake. But in spite of this it is no lake, for it is always at a different place when we have reached the place where we all "saw" it. Hallucinations, too, may occur in several persons at the same time.

We have not yet reached the point where we need concern ourselves with the particular results of the Doctrine of Order as applied to *nature*, that is, to empirical reality in space. Here we only say that the whole of inorganic and of organic nature, and everything that concerns the community of man (and thus the totality of "culture"), can and must now be investigated, one class after the other, from the point of view of *order*. The results will be set out at a later period, but from a wholly different standpoint.

The Doctrine of Order can now also extend its scope to the objects of the science known as psychology,[1] namely, the temporal sequence of my experiences, not in so far as they serve to indicate the existence of empirical objects, but in so far as they are just experiences, together with the laws which govern this temporal sequence. In doing this it reaches the important concept of the *soul*, which is not the same as the conscious "ego",

[1] We might here refer to certain sections of the *Ordnungslehre* as well as to my *Grundprobleme der Psychologie* (1925) for the benefit of those who desire a detailed and rigorous demonstration. (There is an English version under the title of *The Crisis in Psychology*, 1924.)

but something unconscious, with unconscious forces, which yet are not "natural" forces, but something entirely unique, so that "unconscious" just means, "*not* that which I call conscious and know as such." This is the point, too, where the well-known concepts of "subconsciousness", "consciousness", "complex", and many others find their place. We shall have ample opportunity to revert to the results of psychology.

We now consider souls—first my soul, next the souls of others; the definition of the latter is exceedingly complicated, since "I" am the *only* valid *ego* for the Doctrine of Order. All souls, then, are looked upon exactly like nature, that is, *as though* each were this definite and unique one, and *as though* it were independent and variable. Here, too, then, we do not yet speak of any "in itself" or any "absolute"; for the present we avoid any show of metaphysics. And even Ethics can be pursued as a system of statements, simply posited, about what *ought* and what *ought not* to be. "*It ought to be*" is just an elementary and unanalysable term in the doctrine of order, and ethics, as strange as it may sound, is, in its conceptual structure, closely akin to geometry.

It will be seen that the Doctrine of Order has at its disposal an enormous field. The immediate experience, in its immediacy, is always the starting-point; it is, so to speak, the general material which underlies the formation of worlds. And now three separate regions of the world are formed of this material: the realm of mere meanings, which is the sphere of pure logic and of mathematics, the realm of Nature, and the realm of the soul.

The totality of these constitutes "my world".

4. The World "In Itself"

The Doctrine of Order by itself, however, cannot suffice, although it was part of our discipline to pass through it.

For the bare Doctrine of Order by itself, that is, the doctrine that a bare apprehension of order in my world is the sole task of philosophizing man, appears unsatisfactory, and this for a number of reasons.[1] By itself this is no great matter; it is possible to be dissatisfied with one's position and yet to be unable, from the nature of the case, to escape from it. But still the attempt will be made until the conviction is reached that it is absolutely necessary to remain in the unsatisfactory position. Let us therefore, at any rate, make the attempt to leave the sphere of the pure Doctrine of Order. First, however, we must explain what it is that makes it so unsatisfactory, so that from the beginning we hope at least that it may not be the last word of philosophy.

First, there is the fact—to put it briefly—that there is such a thing as *nature* within the sphere of my empirical reality, that is, within a part of my world (or of the ordered sphere which belongs to my consciousness); or, in other words, that I can speak of Nature, natural objects, and natural events, *as though* all these had an independent existence. Why this should be so I do not in any case "understand", although I do grasp a good

[1] Cf. for this section the conclusion of the *Ordnungslehre* and the first paragraphs of the *Wirklichkeitslehre* (Second Edition, 1922), and also the smaller work called *Metaphysik* (1924). (English and American readers may refer to *The Possibility of Metaphysics* (1926), a small work which did not appear in German; it also contains the outlines of the Doctrine of Order.)

deal after a fashion and within the general sphere of Nature; or, at any rate, I clearly seize it after the method of Order. All I can say is that it is very pleasant and satisfactory that the concept of "Nature" should serve to introduce so much order into my world, it is a "lucky fact", as Lotze once remarked. But we still do not *understand* all this. For, after all, it is quite conceivable that all my experiences should succeed one another in a wholly chaotic manner, so that we had not the slightest right to speak of a "Nature" having definite "laws".

Surely it is very strange how all the details of Nature are thus, *as it were*, independent. I see an avalanche starting high up on the mountain; I look away for a while and think of something else, and then I think again of the avalanche, but do not look at the point where I saw it start, but lower. And I am right, and at the exact spot where I expected it I see the avalanche rolling into the valley. Or I take the train at night to go to Munich. I sleep all night long, and next morning I duly arrive at Munich. I had assumed that Nature and its order would be, *as it were*, independent, and I have not been deceived. Indeed, I have never been deceived; and if it ever seemed as though I had been deceived, I always found in the end that I had not yet fully apprehended Nature in its quasi-independent regularity, in its conformity to law—that I had made some mistake with regard to it. For example, I had made the premature assertion that "all" bodies expand when heated, and now discover that there are bodies having a so-called "negative coefficient of expansion", and that one of the most familiar of all substances, namely, water, contracts between 0° and 4° when it is heated.

Nature, then, does not deceive me if I work conscientiously; only I must always ask myself whether I really "know" something or only am "assuming" it, and I must take care not to confuse mere assumption with definitive knowledge. And I must be particularly careful where I enunciate "laws" or make a generalization with regard to natural events. I say "all", and yet at best only know "many" things and events which resemble one another. We may here cite the old example of the proposition "all swans are white", which is true enough until I have seen black ones; yet I would be foolish and obstinate to stick to my proposition and say that these black animals are no swans just *because* they are not white, which is part of the "essence" of a swan. It is better to admit honestly that I have once more been over-hasty in taking "many" swans for "all" swans.

Thus all the things which I classify under the general term of *nature* are, *as it were*, independent, and this is in any case a sufficiently remarkable fact.

And the same is true of the soul and its *quasi*-independence or conformity to law. I go to sleep at night with the knowledge that I shall be "awake" again in the morning. I sit down to a set piece of work, and know that certain ideas which are relevant to it will occur to me; and, to speak of other souls too, and at the same time of rather strange occurrences, I know that a hypnotized person will follow the most absurd suggestions which I may make, and that a patient who suffers from dissociation of personality which runs a regular course will pass during the next week from one state into the other. Here, too, I may be in error; I may die of syncope during the night, something of importance may occur

to me "of itself", although I had not thought of it; the hypnotized person may emerge from the state of hypnosis when I do not expect it, and the person who suffers from dissociated personality may just have been cured. But in every case the fault lay, not with the "soul" which I made the object of my observation, but with my over-hasty judgment. And the case is the same (to adduce one more example of error about souls due to precipitate judgment) when I assume in another person motives which he never had, and when I am deceived about the true motives of my own actions from ignorance of my "subconscious".

Now the very fact that I *can* be deceived is a new and separate matter, and as such is a clear indication of the *quasi*-independence of Nature and of the soul, so that this independence manifests itself in a twofold manner and in the clearest way: Nature and soul permit me to expect certain future events with a great deal of confidence, but yet they always do just as they please, and in such cases my expectation is deceived.

I do not in the least understand why all this should be so. Further, this failure is based on a much deeper foundation. To my experiences in their immediacy with respect to content we have given the name of general material (p. 41), from which spring the three realms of mere meanings, of Nature, and of the soul. Now the question is this: Do I understand why these events in their immediacy are as they *are*? Do I understand why my experiences are not exhausted by the mere statement "I experience a green surface", and if this were the case, would I understand it? Clearly in each case the answer is "on".

How is it, for example, that numbers play any part in my world and that they and their laws can, as it were, be applied to that which I experience? If "green surface" only were my experience, the notion of number would surely be strange to me. For the first true number is not one, but two, and there is no room for two in the green surface; "plane-green" would exhaust the whole of existence for me.

And further, how is it that it is just "number", besides so many other things, which has for me a definite and clear meaning in which order rules—number and nothing else?

I understand neither fact: neither why my immediate experience is as it is, nor why the meanings which I find fall under the rule of order and nothing else. All that I "understand" is the "sense" of these meanings.

It will be seen that the element in Nature and in the soul which is not understood is here reduced to one ultimate element which is not understood.

All this is very far from agreeing with my desire for understanding; I would "like" to understand the whole of my experience, that is, the world, in the same way as that in which I understand, for example, a proposition in geometry (like the theorem of Pythagoras), that is, in such a way that nothing remains to be asked.

Let us imagine that this wish, this *monism of order*, as I have called it, were to be fulfilled. In that case I would have perfect understanding of why the trees before my window stand, and move, and are covered in snow in the precise way in which they do stand, move, and are covered. "Naturally", I would say; "it could not be otherwise". "That would be absurd, and the same as saying that the cube is a sphere."

We know only too well how far we are from a monism of order. We understand but a very small portion. This is better than nothing; but the main question we do not understand; and this is true of our immediate experience in general, and also of our knowledge about "quasi"-independent existence and events in the realms of Nature and of the soul in particular.

We will express this regrettable state of affairs in the following terms: In all experience, and especially in all that which leads us up to the concepts of Nature and of soul, there is a *given* element which completely eludes our understanding.

But, while all that is *given* is thus in principle not to be understood, there is a particular class which, while it falls within the sphere of the *given* (as, indeed, what does not?), demands separate mention, namely, so-called moral consciousness.

We said above that Ethics is a part of the Doctrine of Order, like geometry and many other things. This is correct. That which *ought* and that which *ought not* to be is apprehended by me as a totality of facts having order. But the entities which *ought* to act are egoes, they are conscious entities; I myself am one of them; and every moral action relates to other egoes. Surely all this becomes quite meaningless if the world is no more than my well-ordered dream. It is possible to say that we may be in trouble in a dream, that we may suffer in a dream, and that in our alleged actions in a dream we avoid to do that from which we fear that such results will follow. But this is not "ethics". The voice of conscience has nothing to do with the weighing of the unpleasant consequences of actions. The case is that I *ought* to refrain from doing

something, not because to do it would involve unpleasant consequences for me, but simply because I *ought* not. This is wholly original and elemental, but it is meaningless in a world of dreams, however well it may be ordered.

We must then arrive at a decision. Are we to make a halt, in spite of everything, at the apprehension of the world of perception, an apprehension whose method of operating is confined to ordering—this world to include all that which, within it, is assumed to be *quasi*-independent? And, if not, what are we to do?

We now decide to give up the Doctrine of Order, to go beyond it; and we do this by saying that the word "real" is to have a meaning.

It does not follow from this that the Doctrine of Order is given up as something superfluous. What is done is that all its results are lifted to a higher standpoint, which, curiously enough, is rather close to that of the natural man; only, it has been won with toil, and has not been naïvely adopted.

The Doctrine of Order passes beyond itself owing to reasons of order, namely, because it sees that more order can be effected than before if it passes beyond itself and if it gives a meaning to the word "real".

If a thing is *real*, this now means that it exists *in itself*; it *is* not real in the sense that it is being experienced, or that it exists *quasi*-independently. There is a *real* which is in itself, and the meaning of the real is, that it exists even without being experienced. When "I" consciously experience something, then I apprehend the real in the form of appearance, that is, I "cognize" it in a special manner, the nature of which still, of course, remains to be discussed.

It is only at this point that the word "appearance" has a meaning; and if the word is to be applied so as to have a meaning, it demands the concept of a something which "appears". But this concept of that which is in itself must be adopted expressly and consciously. Kant overlooks this, the main, point, when he says that there can be no appearance without something which appears, without first having expressly laid down the concept of that which is "really" and "in itself". In the sentence of Kant "appearance" is a mere word, from which in itself nothing, of course, "follows"; Kant might equally well have taken another to express *his* meaning. For by the word "appearance" he meant only the something which is experienced,or the content of such an experience. But we, to begin with, have been speaking of this experienced something alone and of nothing besides; next, we have shown that too great a residue which is not understood remains over if we refrain from going any further; and, in order to master this residue, we finally give an express and deliberate meaning to the word "real", and it is only at this point that we speak of "appearance".

Can we demonstrate that the real exists and that it is the basis of all that *given* element which the Doctrine of Order was forced to accept without understanding it? This we cannot do. All that we can say is that we understand rather more if we assume a real. Or, better still, we understand in that case why we do not "understand" the *given* and all that depends from it.

For many people a great difficulty resides in the fact that the concept of the real still remains *my* concept, so that we still are confined within the egocentric sphere.

It is true that the concept of that which is in itself is *my* concept; but the meaning which is allotted to it is, that what is meant by it is not only mine, and that the "in itself" is not "for me" only.

More than this we cannot say at this point. Those, therefore, who think themselves unable to accept our statements must be content to remain within the Doctrine of Order. But in that case they must observe perfect strictness, and must not permit themselves the smallest "metaphysical" excursion, as so many alleged non-metaphysicians have been bold to do.

We admit, then, that in a certain sense the assumption of a real which is in itself is a belief which cannot be demonstrated, a hypothesis which cannot, in principle, be verified. But it is an extremely useful hypothesis.

The hypothesis would, on the other hand, be quite, or at any rate very nearly, useless if now, like Kant, we were to allow our *real* to be a "mere X" (see pp. 29, 30); in that case we would differ from Kant only in the more rigorous manner in which we have reached our X.

But, in fact, it can be shown (at least if certain assumptions be made) that there is a possibility of seizing part of the particular essence of the real, that is, of cognizing it, not only according to its existence, but according to its essence. (The question which is answered is not, "is it there?" but "in what manner is it?")

It will be seen that it is only at this point that we employ the term "to cognize", whereas within the sphere of the Doctrine of Order we employed only "to apprehend". Cognition is a particular kind of apprehension, an apprehension of something that is expressly non-ego, that is, of something which "is", not only in so far as it is appre-

hended, but also "in itself". More strictness in the use of the word "cognition" is really much to be desired.

It is true that our cognition, as will appear immediately, is hypothetical; and, since the existence of the real was itself hypothetical, our cognition moves on a foundation which is doubly hypothetical. Here, too, then, we can compel nobody to follow us, although we expect that we shall be followed.

Now why is our cognition doubly hypothetical?

If "my" world is the appearance of a real, then it is certain that this real must be of such a nature that, precisely because of its nature, the appearance can be such as in fact it is. In other words, the real by its nature must render possible the nature of the appearance. But that which contains within itself the possibility of another entity is called the *reason* of this other. Thus the real is the reason and has the appearance for consequence.

Now there is one way only in which we can investigate the real, and that is by starting from that which we possess. But that which we possess is appearance, and appearance, as we have just seen, is a consequence—a consequence of the real. Thus we pass from consequence to reason. The words are here used in a general sense; the reader is asked not to imagine that "cause" and "effect" are intended.

Now logic shows us that the road from consequence to reason is never unambiguous. If I know that the street is wet, it may have been raining, or thawing, or the water-cart may have passed. Or, to take a purely intellectual example, if I know that we are dealing with conic sections, I still do not know whether we are concerned with a circle, an ellipse, a parabola, or a hyperbola.

Thus, when we take the step from the consequence to the reason, we are never quite safe; hence the step from the nature of appearance to that of reality can never be safe.

Nevertheless, there are some assumptions which, if granted, allow us to make certain statements about the real.

These assumptions are the following: The real is, as it is technically called, "rational", that is, the most general concepts and propositions of an ordering nature which we apply to appearance (that is, to "our world") are valid also for the real. For example, a property of the real which we call A is not, as being this property A, also something other than A (or non-A, as the logicians say); and two properties of the real, *plus* two further properties, are four real properties; and so forth.

Certain so-called mystics have disputed this assumption. I think, however, that, although we cannot "demonstrate" it, we have a right to make it. It is true that we never know the real save under the form of appearance; in so far as there is any real for us at all, it exists *as* appearance. But, after all, appearance is the appearance of a real, and we who experience this appearance are a part of this real. Now the capital propositions of logic and mathematics, like "A is not non-A" and "$2 + 2 = 4$", do apply to appearance. Are we then to say that they do not apply to the real, to that which is in itself? In my opinion we have not the least cause for such a suspicion. For surely there is no reason for the assumption that the real has created for itself, in the consciously experiencing ego, an instrument which, so to say, distorts and mocks it. For, as we have already said, and as will appear in

detail, the ego, in the ordering nature of its experience, is itself an aspect or part of the real. It is not the case that there is the real and something else besides, namely, the experiencing ego. Such an assertion would be perfect nonsense.

We "postulate", then, if that term be desired, the *rationality* of the real.

"Rational", however, means no more than "not incompatible with reason". It goes without saying that it does *not* mean "not passing beyond that which may be apprehended by us as rational beings". A clear distinction must be made between that which is incompatible with and that which is beyond reason. At a later point we shall have to admit that there is a *supra*-rationality of the real, but, however necessary this may be, we have no cause for assuming it to be *anti*-rational. But the meaning of this is, precisely, that we take it to be "rational".

Now if in fact the real is rational, then it is possible to apply at important proposition of general logic to the relation between the real and appearance, this relation (as we know) being that of reason to consequence; and this will prove very useful to us.

In its abstract form this proposition runs as follows: *The reason is never less manifold than the consequence.*

This proposition is valid wherever we are dealing with the relation of reason and consequence; in pure logic, where we deal with concepts and their mutual relations; in natural science, where we deal with cause and effect; and also in the relation between real and appearance, which, as we know, is a particular form of this relation.

If I have the concept of "triangle", it includes, as implication, the concept of "figure". Briefly, we say that

the triangle is a figure. Now it is evident that figure is less manifold than triangle; that is, "triangle" has more so-called characteristics than "figure". On the other hand, in causal relations it is obvious that the particularity which is observed in a "caused" or "effected" event must correspond to something particular in the events which constitute its cause—a cause which, frequently enough, is sufficiently manifold. For where could be the origin of the particular in the effect which has not its basis in a particularity of the cause? It cannot surely be in the void.

In metaphysics the case is the same: we find in the region of appearance a certain number of forms or modes in which terms are connected or related. For example, we find the spatial, the temporal, and the causal relations. One thing is "beside" the other; one happens "after" the other; and friction is a "cause" which engenders heat in a piece of wood. Now there must exist *at least* an equal number of relations in reality, otherwise the law of *reason* would be violated, for then certain parts of appearance would be without reason. We now proceed. Space is a part of appearance, and in space we find all kinds of things having different shapes and different modes of spatial movement. There are spheres, cubes, and tetrahedra; and one heavenly body moves in an ellipse, another in a parabola. There *must* then be at least an equal number of distinctions in reality—in that part of reality which appears to us as "space".

Does this suffice to acquaint us with the modes of relations within the real, and with that aspect of the real which corresponds to the space of appearance, so that we now know these as they are "in themselves"?

The answer is "no". We have knowledge only of their

multiplicity and of the minimum of varieties and particularities in them. Whether space in the real is still "space" is a matter which we do not and indeed cannot know. But we do know, if it is true that the real is rational, that something three-dimensional in the real corresponds to our three-dimensional space. And the same is true of time, causality, and so on.

To know this much is little, but it is better than nothing.

And there is one sphere of our knowledge in which we can say something more.

The one fact which was absolutely beyond doubt was, that I experience something consciously, a fact which at the same time did not refer to the relation between mere meanings, like the proposition that $2 \times 2 = 4$. Everything else we doubted, except this one fundamental fact, which simply did not admit of doubt. And we doubted especially that the world "exists" independently of us. This world might be an ordered dream, it might "exist" for "me" alone. From this sceptical attitude we began our investigation of the world, to see what its order might be, with the final result that we gave up this standpoint of mere apprehension of order.

We *have* now given up this standpoint, and now, as we could not do before, we may ask what becomes of the conscious experience of the ego, or, as we may say more briefly, of its "knowledge"?

Clearly, what becomes of it is something extremely important and significant. All that is known was, in our view, the appearance of a real entity. But what of knowledge itself, of the fundamental fact that I know, or experience consciously? This factsurely cannot be "appearance": this is "real", now that this word has a meaning, though

not before. In the shape of my knowledge, then, a part of reality, namely I myself, "knows", in the form of appearance, many other parts of the real; and this ego also has immediate knowledge of itself as knowing subject, or, as we may perhaps say, as "subjective point".

For, after all, I have knowledge not only of the external, but I also know that I know—I have what is commonly called self-consciousness.

Here, then, we apprehend, or rather we cognize, something in the real such as it is. As knowing, we have cognition of the real; or rather, the real cognizes itself in me, as knowing, and I know quite exactly what this means.

But now we have cognized a part, or a property, of the real, in its real nature, and not merely in the form of appearance.

The real ceases to be a "mere *X*". We know more of it than its multiplicity in a wholly indeterminate form (p. 55).

This is of incalculable importance for the doctrine of reality, or "metaphysics". The significance of all this will appear in the following section; at the end of this section we have one remark only to make.

5. "Metaphysics"

We have given the name of metaphysics to that doctrine which teaches that there is at least some reality lying at the bottom of appearance which is experienced. In these days this is often called realism, since the existence of something real is here assumed. Thus that which is commonly called realism—which must on no account be confused with any form of materialism—is taken by us as a part of metaphysics. It is true that it is only the first part of metaphysics, namely, the doctrine of that which

lies "behind" experience proper; knowing egoes, and much that these know in the form of appearance, lies in turn behind it.

In the main, then, natural man was quite right to speak of a real world outside himself. He had the right also to speak of a "beyond", that is, of parts or aspects of the real which can never be really experienced, can be asserted only hypothetically, and yet "are". We shall have to speak of this second part of metaphysics at a later period.

We also admit in a very large measure the justice of the views of the older "critical" philosophers—of men like Locke, Hume, and Kant, now that we have left the region of pure Doctrine of Order and have admitted the "real".

Indeed, our knowledge, so far as it is based on experience, is a product of that part of the real which is represented by my soul, and of the rest of the real. A causal relation subsists between the alien part of reality and my soul as a part of reality; my soul as a part of reality is first "affected" by the rest of reality, then places the result of the "affection" within its peculiar frame, so to say, and finally "presents" to me the final result of this process in the form of appearance. The German word "Vorstellung" [1] is here extremely profound. Here, then, one part of the real acts upon the other, that is, ultimately, the real acts internally upon itself.

It is true that I do not "manufacture" experience *consciously* from a crude material, as Kant pretended. My soul does "manufacture" something in an *unconscious* form, but even that it probably does not manufacture in the form of "manufacture" proper, but rather in the form

[1] Literally "presentation". The ordinary meaning of the word is nearer to "imagination".

of a translation into its essential language. This, at any rate, is the genesis of colours and of sounds "for me"; and probably, too, of the spatial element in its specifically sensuous manifestation; for we know already that something "three-dimensional" must in each case correspond in the real to anything that appears spatial to me, although that three-dimensional something be a mere X (p. 55).

But if the real is "rational", then its most universal characteristics, that is, all its logical and generally mathematical aspects, pass unchanged in the process of cognition from the object to the apprehending subject (p. 52).

For the rest, we would be led too far into difficult separate problems if we were to attempt a more detailed investigation of the question as to what aspects of the content of experience have their origin in the soul, and what in the object. What has already been stated is sufficient in order to make intelligible the main matter, and we merely add that a true critical doctrine of "cognition" is possible only within the sphere of the doctrine of the metaphysical.

The road which we took in this section began at the naïve picture of the world, passed through all the stages of criticism to intellectual scepticism, that is, to the Doctrine of Order, and then returned to the naïve world-picture in a purified form. In its second part this road took a prudent and modest course, and, to repeat it expressly, one which is wholly hypothetical (p. 51). It was not our intention to enter into competition with certain great metaphysical systems of the past, for such systems, which profess to flow immediately, *a priori*, from reason or from an intellectual intuition, and take up a dogmatic attitude, are, in our opinion, scientifically worthless. At best they

are good poetry, somewhat like the religious myths; but poetry is not philosophy.

In what follows, therefore, we must be careful to remember expressly that every statement which refers to the *real*, or the *in itself*, is at best merely probably. Let us call this proposition the *postulate of moderation*.

B.—THE NATURE OF THE UNIVERSE

I. THE NON-LIVING AND THE LIVING

WE have now become acquainted with the manner in which man apprehends and cognizes the universe; this having been accomplished, it is our task to deal with the question of the *nature* of the universe.[1] This must be done before it is possible to discuss profitably the position which man holds, and "ought" to hold, in relation to the world.

We know already that he apprehends only a small part of the world as it "really" is—if indeed the idea of the *real* and of the *in itself* are admitted as having any meaning, and if we assume this real to be rational (p. 48). If this be granted, he knows a little of its multiplicity in a purely formal manner, and knows that knowledge, the element of the soul or of the spirit, or whatever other name we give it, constitutes one aspect of its true nature. For the rest, he knows it in the form of appearance.

Now physics and chemistry attempt to elaborate as much as possible that part of appearance which, in the narrowest sense of the term, is of *apparent* nature. For colours, sounds, etc, as "secondary properties", they substitute molecules, electrons, or protons, that is, in the philosophical and not in the narrower chemical sense, *atoms*, as we may call them for brevity. Or they even abolish these and speak solely of "fields" and of the distribution of "energy" in them, where energy means capacity for work. In our opinion it will not be possible

[1] Cf. my *Wirklichkeitslehre* (Second Edition, 1922), and the smaller works mentioned on p. 42.

to dispense altogether with some support for energy, with some "substance", which may then be called, in however vague a sense, "matter"; and this is admitted by some physicists, although in these days this view is not wholly "modern". For ultimately there is such a thing as movement in the world, and movement logically presupposes something which moves, and at the same time does not change its nature. Let us therefore boldly speak of matter which is divided into atoms.

But this world of material atoms is still "appearance", and science is unable to apprehend more than some few among its aspects in a manner other than that in which it apprehends appearance; such aspects are its quantitative and numerical relations. For these constitute a part of its formal multiplicity, and of this, it will be remembered, that we assume that it is apprehended as it is (pp. 52 *sqq.*). It is to be noted that only the numerical relations in the sphere of the material world have a place here, and not the absolute numbers of physics and of chemistry, which of course are always referred to some arbitrary unit, like the gramme or the "degree" of the thermometer.

Some aspects of matter, then, are apprehended as they are. But the spatial element, the fact of being in space, or *extension* as such in its sensuous manifestation, still is appearance. Perhaps a real space corresponds to it as such, and perhaps it does not: we cannot know. All that we do know is that that which in the Real corresponds to the space of experience possesses three dimensions in the most general sense of the term; and we may add, for the benefit of readers who are skilled in mathematics, that this space is without "curvature", that is, that it is Euclidean (which destroys Einstein's so-called universal theory of

relativity, if it is to be more than a mere shadowy mathematical formulation).

Now what, in detail, is the nature of this world, which in any event has an atomistic structure, and as such appears in space and time?

We must approach the investigation of this question with great caution, and step by step. And for this reason we will disregard altogether the fact that there is also knowledge, that is, an element of soul or of spirit, within the scope of the real, and will confine ourselves to the consideration of the material world as such.

Our consideration will show us that the material world is divided into two parts which are fundamentally distinct: the world of the non-living and the world of the living.

This much was known already to the naïve natural man.

Later, science often made him doubtful of his knowledge, and that in two different directions. One group of philosophers told him that the sharp distinction between non-living and living cannot stand strict investigation. You admit yourself, so they said, that organic beings are material bodies—your own body weighs so-and-so many pounds and is capable of imparting and suffering impacts. Thus so-called life is nothing either particular or new in the world. The so-called vital processes are simply more complicated and composite processes than those of so-called non-living nature. But all natural events and all changes in matter are determined everywhere by the same laws, namely, by those of Physics and Chemistry, which we will briefly call mechanical laws. The manner in which we formulate them is quite indifferent; it does not matter whether the old laws of Newton once more hold the

field, or whether we must replace them by electrical elementary laws, or by anything else. The same elementary events take place in the two realms, and this is what really matters.

Other teachers, on the other hand, tell our naïve scholar the precise opposite: everything is spirit. Even that which you call a non-living event is a soul-event in its lowest form. Matter itself is an expression of the spirit. Surrender your naïve "dualism". Even a falling stone has sensation, and "wills".

It will probably be clear that such conflicting views must cause great confusion to the natural man—by whom I am far from meaning a savage.

But he need not have been confused, for an honest science, that is, one which is burdened by neither dogma nor anti-dogma, but simply subordinates itself to the facts, tells us that he is right.

There *are*, in fact, two wholly different realms of reality in so far as this manifests itself to us in the form of the material world. True, they both appear in a material form, but the laws which govern the happenings in them are wholly different.

An honest science teaches us that a great division sunders the whole of the reality which appears as "material nature". There are, in fact, events in things which can be explained by the interaction of the ultimate parts (or "atoms") of these things; but there are also events where this is impossible. In this case, if science wishes to speak of the causal determination of these events, it must assume the existence of forces which act as "totalizing" or as "individualizing" forces, where the word "force" is taken in its widest sense; and these

forces must be taken as existing by the side of the forces which start from and reside within the ultimate particles, or atoms. Ultimately this antagonism which divides material nature is of a logical kind—the antagonism between sum and totality. In practice this antagonism is co-extensive with that between non-living and living.

It is true that in the very strictest sense even a non-living collection of atoms is not a "sum". An example of a perfectly strict sum, of a bare "plus", as it is called nowadays, would be "the number 2 and my cat", that is, two entities (for I must not call them things) which have no connection whatever in so far as they *act*—for "2" is a mere meaning and "my cat" is an empirical object. A totality of atoms is still a unit in a certain sense —it is a unit of action; but such a unit is not a totality, and we will boldly call it a "sum" in the wider sense of the term.

In a thing which is of the nature of a sum, that is, in a thing or complex of things which is non-living, in a non-living "system", as the physicists call it, all that I require to know is the relative position of the atoms at a given point of time, their velocities at the same point of time, and the ultimate law of their reciprocal action; that is, briefly, their constellation and the law of their action. If I know all this, I know the "constellation" of the "system" at any future moment; and it is quite indifferent whether the ultimate elementary law of action is in the form of the mechanics of Newton, or of Maxwell, or of Einstein, and even whether the concept of the "atom" in the most universal sense of the word is still employed, or, as modern mathematical physics prefer, mere systems of equations or the quantum of energy are substituted.

Thus in the realm of the non-living I am able to foretell the future mathematically if I know the material constellation for a given point of time, together with the law of action or something that corresponds to it.

This I cannot do in the realm of living nature, although the organism, too, is a material body. Here a new causal factor comes into play, acting not in, but, so to speak, "into" space, its action being, precisely, a totalizing, or "whole-making" action.

A simple logical investigation will suffice to show that this is not a contradiction for thought, and that, in other words, non-mechanical happenings are a possibility. The principle of causality postulates merely that any event must have a sufficient reason in preceding events and in given conditions, but it does *not* assert that this reason must consist in a merely sum-like action of one part upon another. It is even possible to imagine the manner in which a totalizing natural force takes a part in the sum-like play of non-living nature. It is not even necessary to violate the well-known principle of the conservation of energy.

All these things have been overlooked by the "mechanistic" dogmatists of whom we spoke above. They simply identify causality with mechanics—for reasons which remain obscure to me. For a long time it was just the untested fashion in philosophy; for philosophy too has its fashions. And further, men wished that Nature should allow itself to be apprehended as simply as possible, which would in fact be the case if there were nothing but mechanism. But simplicity is not always a sign of truth. Geometry, or the doctrine of space, would be simpler to

learn for the pupil if space "had" only two so-called dimensions; but in fact it has three.

But a matter which is far more important than all this is the demonstration that in fact such totalizing forces do exist in Nature; and this demonstration has been furnished by modern biology (the doctrine of life), when it showed with convincing force that every sum-like or "mechanical" explanation *must* fail before certain events which take place in the living organism. This demonstration is called the doctrine of the autonomy of the living, or, briefly, *Vitalism*. An especial importance here belongs to certain experimental investigations in the sphere of so-called embryology, that is, the doctrine of the development of the organism from the ovum, and in the sphere of the doctrine of regeneration; that is, the doctrine of the reconstruction of the mutilated organism, investigations which are not superficial, but go down to the ultimate details. It is *impossible* here that the events should be based on a "machine", that is, upon a structure having definite functions for its end, and acting purely "mechanically", that is, in a sum-like manner. This is the case, for example, when a young embryo, consisting of some thousand cells, is cut into two parts in any chosen manner, and thereafter the whole of the mature organism arises from each of these two parts, but on a smaller scale; and also in many other cases which have been dealt with in detail in my *Science and Philosophy of the Organism*.[1] The results of the experiments show that it is impossible to regard the individual cells of the embryo as being predordained for a future function in building up the organization of the mature entity; nor can this be an instance of

[1] Second Edition, 1929. A. & C. Black, London.

reciprocal action of a physico-chemical nature between the individual cells—precisely because it is possible, within certain limits, to cut the embryo in two in any manner that is desired without disturbing the final result of the development. The so-called machine-theory is also refuted in the clearest manner by the fact that it is possible to rear two or four entire organisms from the two or four first so-called blastomeres into which the fertilized ovum divides at the first stage of its development, if these cells have been previously separated; while if two ova have been caused to amalgamate, an organism may be reared which turns out a "giant". A machine, that is, a specific structure designed for particular functions, does not remain as it was if it is divided into two or four parts, or is deprived of certain parts at will, or, as we may add, if the relative position of its parts is changed arbitrarily.

Further, the behaviour of beasts and man, their "actions" taken purely as material movements, that is, quite without regard to the element of soul, shows irrefutably that any "mechanical" explanation is out of the question; all that is part of the psychological concept of "memory" eludes mechanism, still more all that we call "understanding".

It will be said that all this is appearance, whereas our wish is to understand the real. My reply is that we *have* understood it—at any rate in essentials. For *sum* and *whole* are concepts which are part of the fundamental apparatus of the concepts of order, and of the "rational"; and it was a property of the latter that it could be applied to the real (p. 52), since no reason could be found why this should not be so.

A great division, accordingly, which is given us in the

form of appearance (namely, that between sum-events and totality-events), passes through the Real itself, in so far as the latter appears to us as material world, or as Nature.

We do not, of course, know anything of the nature of the actual quality of this division in the real; in the realm of appearance, that is, empirically, it manifests itself, of course, only in the fact that certain material bodies, namely, the non-living bodies, are subject to sum-like laws, while others, namely, the organisms, are subject to totalizing laws. Both are material bodies, and as such are empirical data.

II. THE SPIRITUAL ELEMENT AND ITS FORMS

It is at this point that our knowledge of the metaphysical significance of *knowledge* has its place: *the real has knowledge of itself in my knowledge* (p. 56). Knowledge is a fundamental quality of the real, perhaps by the side of other such qualities. At any rate, it is the only one of its fundamental qualities with which I am acquainted. Knowledge is knowledge also "in itself". We propose occasionally to call the aspect of knowledge in the real "spirit", but only in order to have at hand a short word, and without reference to the contrast between "soul" and "spirit" or the like.

Now as foundation for my properly conscious knowledge, for "ego-knowledge" proper, I assumed an unconscious but non-material basis, namely, the soul (p. 40). The soul too has knowledge, but in a form which is beyond my immediate reach, and is higher than that in which "I" have knowledge. It is, so to speak, another "species" within the same general "genus".

Is it perhaps the case that there are other species of

this general "genus" called knowledge, and that the "totalizing" force, which is active in organic nature, is one of these?

Merely to "assume" this would not be a great matter: mere so-called assumptions are generally of extremely small significance. But the case would be different if such an assumption were only the last (hypothetical) member of a long series of established facts, each the result of thought. And this is here the case.

1. The Stages of Spirit

My soul—my body. This is the point at which we begin.[1]

My body belongs to the organic species; it is a material and living body, the movements of which are subjected to totalizing and non-mechanical causality. It is permissible, as we know, to apply this result of experience to the real (p. 67). Thus there is a particular totalizing force, expressly relating to my body as appearance. What, on the other hand, are we to say of my soul? We know already that it must not simply be equated with the experiencing ego; it denotes a particular realm of knowledge, which, with reference to "me", is uncon scious, and it contains forces which have the power to offer a perpetual supply of new imaginations to "me", the conscious entity, and to work up that which in a metaphorical sense is "in me", into an insight of growing richness. It may be translated into the real under the form of knowledge. But if this is so, may it not be suspected

[1] Cf. my *Leib und Seele* (Third Edition, 1923; English version, *Mind and Body*, 1927) and certain sections of *Grundprobleme der Psychologie* (*The Crisis in Psychology*). See p. 40, note.

of being identical, in the realm of the real, with the totalizing force which guides the movements of my body, or at least its voluntary movements? On this view there would be one metaphysical foundation only for my person, taken as a complex of body and soul, in the realm of the real, and the fact that in the sphere of experience we considered the soul and the living entity separately would be due to the fact that, for experience, inner life, and the life of the body are two separate regions in the realm of objects.

Experience already has the right to tell us that the action of the totalizing force which moves the body runs *parallel*, metaphorically speaking, to the action of the soul with its forces; and in turn "my" conscious experience runs *parallel* with the succession of certain states of my soul. Now in the region of the real, the force which moves the body and the soul are identical, and my conscious experience signals to me certain states of this metaphysical unit.

We have just spoken of a *parallelism*, and some of my readers will be aware that this word, which, as we said, is no more than a metaphor, has played a great part in psychology since the period of 1850. Men spoke of a "psycho-physical parallelism", and meant by this, in the mechanistic period of European science, that conscious experience runs parallel with the mechanism of the brain —that it is this same mechanism seen "from the other side". Now *this* form of parallelism is absurd, and can easily be refuted. For the brain is not a mere mechanism, resting in itself and partaking of the nature of a machine; it is, if that expression be desired, a machine which is governed in its action by a force which is linked to it but

is not material. But my intention in speaking of a parallelism is something quite different from the old and discarded doctrine of a parallelism between consciousness and the mechanism of the brain. I mean that two structures which belong to empirical reality and are invisible, namely, the soul and the totalizing natural force as governing the movement of the body, run "parallel" in their respective actions, and *also* run "parallel" to my conscious experience, so that at this point we actually have three parallels. Next, these three parallels become metaphysically two, since (1) the action of the soul and vital action become one, and (2) this common metaphysical foundation of the soul and of the force of the body has knowledge of itself (with respect to certain of its aspects, and not completely) in the form of *my* knowledge and *my* experience.

I said just now that whenever I have knowledge of myself, this did not constitute an instance of complete experience for the real ultimate foundation. This fact will become important at a later point: at the moment I merely remark that, when I experience, this event is one of *having* or of *possession*, and is never an action. It is especially true that when I wish to execute an action of will (for instance, to take hold of something), I really do not "do" anything. I will, and it happens—namely, my arm moves. As natural man I know nothing of the necessary conditions which precede the movement of my arm, of the stimulation of the nerves and of the contraction of the muscles. Nor are these the objects of my will—my will is to take hold of the book. Even as scientist I do not know what it is that causes the nerve to be stimulated, although the scientist may know a good deal about

the stimulation of the nerves and a good many other things besides; and even as physiologist I "will" merely to take hold of my book and not to stimulate my nerves.

It is my soul, or the common real foundation of it and of my body-force, which knows how this strange event, the stimulation of the nerves, is brought about; and the soul, in each case, does what is necessary.

And the case is the same when I reflect on something, or wish to recollect something; only recollection is not a movement of my body, but belongs to the inner part of my soul. In so-called reflection *I "do"* nothing at all: it is my soul that *does*, and that presents to me the results of its action in conscious form.

We shall revert to all this later.

The metaphysical unity constituted by the forces of my soul and my body has thus a strictly limited knowledge of itself in the form of *my* knowledge and *my* experience. Only certain *states*, and not *activities*, of my ultimate metaphysical foundation are experienced by *me* in the form of imaginations. Thus the parallelism of the life-soul element and the conscious really consists of the parallelism of a line and a series of points; for *I* experience, to use a metaphor, in the form of points.

We revert, however, to the problem of body and soul as a whole. So far we have been speaking of *my* soul and of *my* body only. But there are many other bodies which are very similar to my body, namely, other men. Their manner of moving is very similar to that in which my body moves. I can always imagine that I *might* move in the same way in which they move. But, so I proceed, if I were to do so, then I would have certain experiences.

The other men too, then, may be presumed to have experiences, that is, to be egoes. But then their egoes have souls for their foundations, and the souls have, in common with the force which moves their bodies, one and the same real and knowing entity for metaphysical foundation. I thus have what is practically certain knowledge of other souls and their real foundations, although I am made aware of the latter in an indirect manner only, namely, through the movements of other entities; for I do not hold that there is a valid foundation for the popular modern doctrine that I have an immediate knowledge of the "you". At any rate, it is certain that I do not possess this knowledge in the way which this doctrine intends, although it may be that we have it within the sphere of moral consciousness, of which I shall speak at a later point; and even this would not be an immediate form of knowledge of the "you".

We now proceed.

Surely that which is true of all men is also true of my dog, and indeed of every animal in so far as it has movement. There can be no doubt; even certain infusoria move in a manner which allows us to conclude that they have memory.

There are, then, metaphysical "points of knowledge" in large numbers and in many varieties.

Hence we come to the important conclusion that many things in the material world which are of the nature of totalities have their assured ground in individual souls in the real.

At this point we must confine ourselves to speaking of "many" and not of all, for so far we have been dealing with organisms only in so far as they have motion—we

have been dealing with their behaviour alone and with nothing else.

But now, as we know, there are the so-called physiological processes of digestion, secretion, and so forth; and above all there are the morphological processes (embryological as well as regenerative) by means of which the organism, when injured and even when broken up, reconstitutes itself. And we have already seen that these processes are non-mechanical, and that they are events which may be traced back to a totalizing and non-mechanical natural force (pp. 66 *sqq.*). Surely we have the right to suspect that the totalizing natural factor which here plays a part is *also* the expression of a particular form of knowledge in the realm of the real. For the facts look very much as though it "willed" something, and as though it knew how to execute that which it "willed". It is true that its knowledge is not simply to be identified with our knowledge. Our knowledge is acquired by experience and learning, and when we are faced by a new situation we experiment in order to find the right method, until, if we are fortunate, we reach that which we desire. But the natural factor does not need to experiment; it is acquainted from the beginning with the proper means for the attainment of that which it "wills", and has this acquaintance even under the most unusual conditions, such as are imposed on it when it is the object of an experiment. This is the case, for example, when a worm, after having been mutilated in any manner desired, reconstitutes its normal organization; or when a group of isolated blastomeres (for example, three out of the first eight) immediately begin to work towards the formation, on a smaller scale, of a *whole* organism within which, in the

normal course of events, they would only have formed three-eights of the structure. Accordingly we must not compare the knowledge of our natural force with so-called intelligence, but with that which, in bees, ants, and nest-building birds, we call instinct; here, too, there is a non-empirical form of knowledge.

It is true that we do not really understand instinct either, since we possess it only in a rudimentary form; and in so far it may be objected that we are explaining one unknown by another. Nevertheless, it is certain that instinct is one species of the genus knowledge, and for this very reason we may assert with a great deal of con fidence that the totalizing and formative natural force, too, is something kindred to knowledge.

Thus everything within the sphere of material Nature, that is, of a totalizing character, and that cannot be resolved into mechanism, is classed by these considerations under the aspect of knowledge of the real. Wherever, within the realm of the material world, we discover phenomena which cannot be explained mechanically, there the aspect of soul, or of spirit, or whatever else we may call it, in the real, is manifested to us.

Now might it not be the case that matter itself with the forces which attach to its atoms is likewise an expression of this spiritual aspect of the real? Many, as I have already said, have made this assertion, without, however, in my opinion, offering adequate reasons. It is true that every mechanical event in Nature is subject to laws, and to this extent has order. But here there is no *totality*; at the utmost there are geometrical structures of equilibrium like crystals; non-living Nature never sets its aim at the typical composite form in which each part fulfils its

functions for itself and is preserved by all the others in the capacity to fulfil them, even though Nature perhaps does represent a *unity* of effect.

Up to this point we have avoided the use of the word *adequate* and of *adequacy* to an end with reference to the totalizing entity within the sphere of material Nature. For, if natural science desires to be wholly objective, it has no right to introduce these concepts at the beginning, since it is concerned solely with laws governing the movement of matter, which in the sphere of living Nature are other (namely totalizing) than they are in the sphere of non-living Nature.

But now, at the end of our long investigation of the question whether the totalizing force in material Nature may be referred to entities partaking of the character of soul within the sphere of the real, we may perhaps be allowed to use these expressions, as well as the synonymous term teleological (that is, directed towards an end). It can no longer do any harm if it is remembered that, in the sphere of biology proper, we are never concerned with knowledge and will of the human and conscious type which is based upon experience—not even by way of a so-called analogy. But knowledge is a genus having many species, some of which are perhaps of such a kind that we are rarely or never aware of their existence.

2. Supra-Personal Spirit

So far we have studied totality in the world only in so far as it relates to the living person, to the individual, including his soul.

Is it possible to apply this concept of the totality to the

material world?[1] Is this world perhaps a genuine Whole?

A strict thinker will be unable to answer this question in the affirmative. There certainly are no grounds which will allow us to assert that the non-living side of the world is a Whole. It is true that it is a unity of causal relations, since ultimately every atom is related to every other by some force. Further—especially in the form which Newton gave it—it has an extremely rational, or intelligible, structure—as witness the so-called parallelogram of forces and the minimum principles of mechanics. Assuredly, if *we* had had to build this world, we would have made it as it is.

That, however, exhausts all that we can say; and to add that lakes, rivers, seas, and plains, and so on, are expressly *for* man is a very useless extravagance. The only facts which might at a later period open a path to knowledge have been communicated by the American scholar, Professor Henderson. According to him, each of the chemical substances which are most important for life, namely, Carbon (C), Carbon Dioxide (CO_2), and Water (H_2O), has a peculiar position among all substances with regard to each of its constant chemical and physical properties (or *constants*), and its significance for life depends, precisely, on this peculiar position. Thus the very fact that these substances exist at all, and indeed are extremely common, seems to stand in what might be called a harmonious relation to life, and to the possibility of life. Now the existence, frequency, and distribution of any substance, whether it is a compound or a so-called

[1] Cf. the corresponding sections in the *Ordnungslehre* and the *Wirklichkeitslehre*.

chemical element, obviously depends ultimately upon the primary distribution of the true elements, the electrons and the protons. It might thus be said that the original distribution of matter was favourable to life. To life here, of course, means merely to utilization by the totalizing natural factor which governs life. For the doctrine that life arose out of the bare forces of matter is wholly absurd.

The case of the living, or organic, side of Nature is different from that of the non-living.

It is true that the totality of all life in the past and present (and in the future) forms a whole in a certain sense. All life is derived from life by means of generation, and it is extremely probable that, in accordance with the teaching of the so-called theory of descent, all the various forms of life which to-day cover the world are, in some way, connected genetically.

The only totality here, however, would be the totality of the living in the manifestation of its essence, while the position and behaviour of each individual, the *hic et nunc* in scholastic terms, could not be assigned a place within a totality—such facts, for example, as that an oak is standing here and that a dog is running there.

We have no knowledge at all of the process by means of which this descent of one organic species from the other took place; we only know that the special theories which are associated with the names of Darwin and of Lamarck fail to meet the essential issue, namely, the prime cause of the differentiation, so that if not actually wrong, they are, at any rate, inadequate. "Natural selection in the struggle for existence" especially is a factor which acts exclusively in a negative, that is, an elimi-

nating, manner. Whence came the entities among which selection operated? That, precisely, we do not know.

Hypothetically we may compare the totality of the living with one great embryology, the cells of which are individuals. But this comparison fails in so far as it is not the case here, as it is in embryology, that one connected structure, one "thing"; is formed, but many unconnected things, whose distribution in space is contingent. It is only the *essential* totality of all forms which one might call *whole* in a certain sense.

What, however, is the "end" of so-called phylogenetic development? We have no knowledge at all of this, but must be on our guard lest we be so bold as to look at man as the sole end of organic creation.

It is a pity that so many scientists still refuse to realize how monstrous is our ignorance just on this subject.

And we are likely to remain rather ignorant; for there is only one totality of life, and only one phylogenetic history. We cannot therefore make experiments with this sole totality, quite apart from the fact that we stand in the middle of it and form part of it. Our relation to the organic history is the same as that in which one definite embryonic cell (for example, that of a frog) stands to the totality of the great event in which it merely plays one part. Let us imagine one such embryonic cell equipped with consciousness: what would it know of the laws which govern the embryonic process? Nothing whatever.

Hypotheses are most popular in those fields where they cannot be refuted, just because nobody knows any better.

Such is the case here, and such is also the case of the so-called "philosophy" of history, which is so popular in these days—a philosophy which, in fact, is no better

than a mass of wild speculations, apart from the work of a few serious thinkers like Buckle, Taine, Lamprecht, Breysig, H. Schneider, and Th. Lessing.

The question is this: is mankind in its spiritual aspect a whole, and does it develop as an egg develops into the nature entity in the strict sense of the term; that is, is it a great process regularly determined in all, or at least in most, of its details? Is it the development of a great supra-personal plan?

In my opinion we have no cause here to assume that there is a special, supra-personal, historical, and totalizing factor such as seemed probable within the sphere of organic phylogeny, although I do not wish to deny that mankind is united into a *unity* and even into a *totality* of a supra-personal kind by many of the characteristics of its soul, and especially by its moral consciousness. But a *totality* is not implicitly in a state of real evolution, if this word be taken in its exact meaning.

Apart from racial differences, which belong to biology proper only and are of no great importance for the element of spirit, or at any rate of no essential importance in the deeper sense of that term, it seems that men have been essentially similar from all times, and that as long as they have been men they have been essentially similar in all places, differing only in a quantitative manner, for example in so-called talent.

All that forms part of "history" can ultimately be referred to the soul-life of the individuals and to the reciprocal relations between soul-individuals. The soul-life of individuals suffices to explain it, and consequently it is as indifferent in all its details for the essence of the world as is the behaviour of any one beehive or of any

one pack of wolves. All that *is* essential is the fact that there are such entities as man, bee, and wolf; and also, perhaps, the actions of individual men with respect to their spiritual and moral perfection—which will be dealt with later.

But, although we deny genuine *evolution*, we do not, as we have already said, deny the *unity* or even the *totality* of mankind; the very fact that men exert influence upon each other by means of speech and writing, and that they understand each other, that they can form states, and other facts as well, are tokens of their unity; and the unity, or, as we may say, the totality, has an ever clearer manifestation in the moral consciousness which is planted in each individual. But we do not find any trace of any design (to speak from the human standpoint) governing the temporal mutations of human society—a design allowing us to infer that there is a supra-personal being whose evolution forms the foundation of so-called history. All that is essential to the world is the general capacity for forming states, and not the individual states themselves. There are in history agglomerations ("cumulations") which may be traced back to psychical, reciprocal, and individual influence (and this influence may be "suggestive"), but there is no real "evolution". Human vanity must not be allowed to tempt us here to erect vague hypotheses.

It is time that an end were put to the popular fashion of playing carelessly with the word *evolution*. A mere change in the course of time does not amount to evolution. Evolution implies an original disposition which comprehends and guides every detail, and in doing so develops an *entelechy*, to use the word coined by

Aristotle. Where there is genuine evolution, there the apparent details of the process are not genuine "details" at all, and the reciprocal relations of the parts to one another do not suffice to render the process intelligible. In so far as this is the case in the geological or in the historical process (although the latter has a different, a psychological, foundation), we are not in the presence of *evolution*, but of "cumulation", if a short word be desired to describe the case.

We have certain knowledge only in the fields of personal organic morphology, in embryology, and in regeneration; we suspect it in phylogeny or racial history. And that is all. We certainly have no wish to deny dogmatically that there will ever be discovered anything of a genuinely evolutionary nature in the sphere of history proper; it might be discovered, for example, where wholly new spiritual and ethical tasks come before the mind. But we *know* nothing, in the strict sense of the term, and it is an approved principle of investigation that new forces—and an historical supra-personal entelechy would be a new force—should be introduced only where we are absolutely compelled to do so.[1]

3. The Spiritual as Such

(*a*) *What is the Object of "Knowledge"?*

We will now cast a comprehensive glance at that Nature which is apprehended by man and refers him to a Real, in so far as *totality* and *knowledge* take a part in it.

[1] Formerly I used to be rather more optimistic with regard to historical evolution. Cf. my *Wirklichkeitslehre*, Second Edition, 1922, pp. 217 *sq.*, 339 *sqq.*

The dualism of the real, that is, its twofold character, is constituted by the fact that it consists of one side which appears to the ego in the form of matter, and is sum-like and contingent, and of another which is of the nature of a totality, has knowledge, and is apprehended by the ego as it "is" in one small respect, namely, that which relates to the nature of its own knowledge. The two sides of this cosmic dualism are interconnected, if it be desired to give a name to something which is inexpressible.

It is very instructive to consider *knowledge* itself more closely. For one of its species is known to me immediately as it is, namely, in the form of my conscious knowledge, so that I am quite able to say something about the universal genus "knowledge" as well as about those its other species of which I have a knowledge which I gain indirectly from the behaviour of various natural organic structures; and I am able to do this even although it may be the case that there are forms of knowledge within the real which are wholly inaccessible to me.

Let us now ask ourselves the question, what are the various entities of which I can have knowledge of the kind which I have just called *my knowledge*? Let us inquire after the *objects* of my knowledge.

The things which can be the objects of human knowledge are of extremely diverse nature.

First, then, I know, and so does every man, my *immediate* experiences; for example, I know that I have the visual impression of a tree, or that I hear a noise. To have such knowledge means, precisely, to experience. It must, however, be clearly understood that the object here is not the tree as a natural object, but the experience of a tree-image of which I have a visual sense-datum. Wishes,

feelings, and thoughts too are such immediately "known" experiences. But also I know immediately the *meaning* of these immediate experiences and the relations which subsist between the terms which they "mean". I know, for example, that $7 \times 7 = 49$, and that the meaning of "triangle" implies (to use the logical term) the meaning "geometrical figure"—("the triangle is a figure"). What has here been described is the only perfectly immediate form of knowledge; logic and mathematics operate within its sphere, and the subject and the object of knowledge are inseparably connected. We may add that I have knowledge of this my knowledge, or, in other words, that I know that I know; or, at any rate, I have the power to bring to mind this fundamental fact of so-called self-consciousness at any time, although I am not always doing so in ordinary life.

Secondly, I have knowledge (and so has every man) of my *past* experiences. In that case I say that I recollect. Here I may make a mistake, which is, of course, impossible with regard to immediate and present experiences. Such a mistake may consist in a belief that I have experienced something that I never did experience (a rare case), or in a belief that I experienced it in one form, whereas in fact I experienced it in another. I may also be mistaken with regard to the time at which a past event took place: I may imagine that it happened a fortnight ago, when in fact it happened three weeks ago.

Thirdly, I have knowledge (and so has every man) of what I call *natural objects* and natural events. This is an indirect kind of knowledge, which we have already discussed thoroughly (pp. 36 *sqq.*). I know, for example, that my desk stands at a certain place in my

room, or, to take account of higher realms of knowledge, that an electric current which passes through a wire always heats it and causes it to glow.—I thus have knowledge of the laws of Nature too.

Fourthly, I know (and so does every man) that at the bottom of my experience there is something unconscious which I call my *soul*. This also is an indirect kind of knowledge, for I tell myself that there must be something of this kind, since otherwise I could not understand the course of my "inner life", which is given to me immediately. I am not the author of this course, which comes as it wills, and very often is quite contrary to my will. I say of my soul that in its function as memory it preserves the whole of my past experience; but I also set it down as the cause of the fact that everything that has passed into it is digested by it into ordered forms which afterwards it presents (*vorstellt*) to me; we already know that the German *Vorstellung* contains a profound truth.

Fifthly, I know (and so does every man), in an indirect manner, as the result of a process of reasoning, that other egoes, or souls, exist, having definite experiences, definite recollections, and definite soul-dispositions. I also assign all these properties to animals, and of the forces which are active in organic life I say that at any rate they are forces of a soul-*like* nature.

We now ask what, if anything, is common to all these forms of knowledge in spite of their differences. I think that they have something in common, namely, the fact that in every case there is a subject and an object, and that there subsists between them the relation called knowledge —indefinable and known to all.

Thus at bottom we are not in the presence of different

forms of knowledge; the differences subsist between the spheres of those things which are the objects of knowledge, and these differences are considerable.

It is, however, quite unthinkable that even objects of thought different from those with which we are familiar could be known in any other form than this: *A subject knows an object*, or, to put it more shortly, *S knows O*; so that we are in fact in a position to say that this "*S knows O*" is the universal and fundamental form of knowledge as a constituent part of the real; whereas so-called species of knowledge always relate only to differences between the objects of knowledge, and also, as we soon shall see, to the forms in which knowledge is acquired. Even those who believe in a personal and omniscient God must believe that he knows in the form *S knows O*; and creatures of instinct, clairvoyants and the like, always know in this form and in no other. Anything that has not this form we would never call knowledge.

If now we desire to bring somewhat closer to our understanding this fundamental characteristic of the whole of reality, then we may probably make the following assertions about it:—

First, every subject within the real has its content of experience, which is saturated with significance and is peculiar to the subject. But further, it is connected with every element of that side of the real which, when it becomes manifest to the senses, I call matter, and also with every other knowing subject within the sphere of the real, by the relation of "potential Knowledge"; that is, every subject can potentially have knowledge of every other subject, together with its experience-content, as well as of the whole of matter. It is true that, in order

that potential knowledge shall become actual, something must be added; for, although beings may exist, which do not require experience beforehand in order to have knowledge of "everything", yet it is certain that this is not the case with ourselves or with the beings with which we are acquainted.

To use a figure, we may say that the case is as though every subject that is capable of consciousness were connected with every element of matter and with every other knowing subject by means of a loose band: if the band is drawn tight, then the subject actually does know about a material element or about another subject and the content of its consciousness.

(*b*) *How is Knowledge "Acquired"?*

Who or what draws tight the band?

When we proceed to answer this question, that is, the question about the forms in which we acquire knowledge, then we must start again from our own knowledge, and take into consideration the knowledge of other creatures (like creatures of instinct) only occasionally, since this knowledge is rather obscure to us.

Now here it is immediately clear with regard to our knowledge about the things and events of nature, and with regard to our knowledge of other souls (a knowledge invariably derived through a knowledge about corporeal movements, which includes language), that it is the so-called stimulation of the organs of sense, like the eye, or the brain of our bodies, which normally draws tight the band (to retain our figure), by which process potential knowledge becomes actual knowledge. To put it in other words: normally we acquire our knowledge of the things

and the events of nature and of other souls and their knowledge-contents by means of *sensation*, the results of which our soul digests in the most manifold ways by means of its internal dynamics, ordering them and finally "presenting" to us the results of this labour.

But it has always been known, and the fact has been confirmed by modern science, that there are other ways too, although, according to the present state of our knowledge, only few men can walk these ways. The way of so-called clairvoyance leads such men to have knowledge of secret or hidden states of nature and natural events; the way of telepathy, or thought-reading, leads them to have knowledge of the experiences of other souls; and in neither case does any stimulation of the organs of sense take place. At present we do not know who it is who has drawn tight the band which connects one subject with objects or with other subjects, and who has thus changed a potential into an actual knowledge. It would seem as though in genuine telepathy, where one soul sends a message to another when faced with death or great danger, the band is drawn tight by means of a powerful emotion in the sending soul; on the other hand, in thought-reading, where it is the recipient, and not, as in telepathy, the sender, who is the properly active part, the so-called *trance* of the "medium" (a condition resembling sleep) is generally the necessary condition which allows this event to take place; this, however, is not always the case, for thought-reading can also take place in a state of wakefulness. We shall revert to these matters at a later point; here we merely mention the fact that many cases of thought-reading, but not all, take place in the form of so-called psychometry; an object which

belonged to a certain person who stood in a certain relation to this object reveals to the medium, when seen or touched by it, the past history of its former owner.

We do not know what it is that draws tight the band when recollection gives us knowledge of past experiences. All that we do know is that sleep and the state of hypnosis act favourably, for in sleep and in hypnosis we often recollect what was forgotten long ago. For the rest, we set down the various activities of recollection to the unconscious dynamics of the soul.

We need not, of course, speak in this connection about our actual and immediately "present" knowledge, for such experiences mean, precisely, that the band has been drawn tight for some definite knowledge-experience, and the experiences are the result of this tension. The fact that this present experience always takes place within the realm of the logical and mathematical meanings, and the systems built up from such meanings, simply expresses the fact that this realm is an essential part of knowledge and of conscious experience. We simply have this realm *a priori*, or, in psychological phraseology, it is innate in us. It would seem that many creatures of instinct, like ants, bees, and certain birds, are characterized by a far greater wealth of innate knowledge; they have not only what we too have, namely, a knowledge of the most universal forms in which the Real is ordered, that is, the logical and the mathematical forms: they also have a knowledge of certain particulars of the empirical world, which, for them, are of vital importance.

Finally, we saw that *my* soul is for me no more than a theoretical construction, which has been elaborated in order to make in some measure intelligible to "me" the

ordered succession of "my" experiences. There is here no special fashion in which the band is drawn tight. The acquisition proper of knowledge here goes back to the complex of my memories. The totality of what I have acquired in this way serves as basis upon which I build the theoretical concept of *my soul*, and by this I mean a subject which stands in a relation to the ego, but is not the same as the ego; it is more: it does not only know, but it also acts—and this is denied to *me*.

Thus particular contents of knowledge are acquired in the normal and abnormal manners which we have described above; but the fact that there is knowledge at all is, to use Goethe's expression, a fundamental fact (Urphænomen).

Now why is it that the whole of our knowledge is not innate in us in full completeness, that is, in the same way in which the most universal forms of knowledge (logical and mathematical knowledge) are innate?

Or does such knowledge, or an approximation to such knowledge, exist in certain rare cases after all? This question takes us to certain fundamental if not perfectly normal facts in matters of knowledge, and it also takes us to a form of knowledge which we have not yet discussed, but whose existence is asserted with great confidence by many, namely, premonition or prophesy.

The investigations of Osty and others make it impossible any longer to deny the fact that prophesy exists. Where it occurs, however, it generally goes with other supranormal forms of knowledge, which are something more than thought-reading or clairvoyance of what may be called the petty kind. The Metagnome (a name given by the French scientists to men endowed with supra-

normal faculties of the highest kind) is often acquainted with what may be called the totality of a man's fate, or his unconscious life-plan, and he is acquainted with it in respect to past as well as future, together with all external contingencies. Osty, in fact, assumes that a "transcendental plan" exists for each man in a universal and supra-personal consciousness; it is within this latter that the Metagnome "reads" the "plan". Further, by the help of a "psychometric" object (p. 88) or the like, which here exerts its mysterious power, he is able to read the Plan of a dead person in this supra-consciousness—an idea which was expressed many years ago in a similar form by the great American psychologist, William James.

We do not here enter into details; we shall consider these matters again later, but from a different point of view. Here we will only say that the knowledge of the Metagnome would be the most perfect kind of all kinds of knowledge known to us (although it too would be in the form S knows O); it would approximate to the kind of knowledge which Leibniz attributed to his Monads. Why are we all not Metagnomes? We do not know.

We must not forget that in the fundamental regions of psychology our knowledge is in its very earliest stages. For this science has for far too long a time been concerning itself with what is in the truest sense of the term the most "superficial" set of states of the soul—the conscious states, and also with the psychology of sense-perception. Besides all this, it held for a long time a mechanistic attitude, and thus hampered its own progress. With few exceptions, whatever is fundamental in the Soul has been discovered, not by psychologists, but

by psychiatrists, that is, by men who were students of the abnormal in the life of the soul. And even now psychologists proper do not do it justice.

(*c*) *The Many and the One*

We have now come to the conclusion that "species" or "forms" of knowledge always refer to the objects of knowledge and to the ways by which knowledge is acquired, and never to knowledge in its original form, S knows O,[1] and having reached this conclusion we ask an important question, which was already implied in our previous discussions. This question is whether that part of the real which knows in a totalizing manner and which (as experience shows) appears in the form of many subjects is really and ultimately a "many", or whether the Many are ultimately united into a One.

Of course this question is not intended to imply a suggestion that the Many here are mere "appearance". Experience shows that the multitude of subjects exists as a definite multiplicity, and, as we know (p. 53), each empirical multiplicity has *some* significance for the Real. Thus it is certain that the state of knowledge of the Real contains a manifold state. The only question is whether by the side of this state (of course this is not to be taken in a spatial sense) there is also a single state.

Now here it is an important fact that in many regions of our knowledge we have direct empirical acquaintance with transitions from multiplicity to unity within the

[1] It might be objected that my soul surely typifies another form of knowledge itself, since its knowledge, unlike that of the ego, implies not only possession but also action (p. 40). But in my soul, too, knowledge is just knowledge, and all that occurs is that a new content of knowledge is added to it: The soul knows how *action* is brought about.

sphere of knowledge and of totality; and the converse too is true.

I begin by setting out some cases gathered from my own experience, the discussion of which may also be taken as a complement to that section of this book which treated of the fact that the events of organic life are autonomous and not to be resolved by mechanical procedure (p. 65).

If the two or the four first cells into which the animal ovum divides during the process of so-called cleavage be separated from one another, then each of these cells grows into a small but complete organism. Conversely, if two ova be caused to amalgamate with parallel axes, the result is a "giant".

What is the meaning of this? It is, that the material which, if left undisturbed, would have grown into one, can grow into many—into twins or into fourlings. And similarly the material destined for many may furnish one only.

This is immediately true of the organic form. But it is also true of the *soul* of the beings in question: where without the interference of the experimenter there would have been one soul, there are now several, and conversely. It is true that the experiments which we have mentioned were made upon the ova of sea-urchins, newts, fishes, and other low forms of animal life, and perhaps the soul of such will not be rated very highly. But it is quite possible to imagine these experiments made upon the human ovum, although this is not practicable to make them in fact; and it will be admitted that man has a soul.

The case is similar where regeneration takes place, that is, where a worm, for example, is cut up into pieces,

and we then observe a number of worms in process of formation, equal in number to the number of pieces.

And finally it is true, after all, that all the ova of a female, and all the sperms of a male individual, formerly constituted one cell in an early embryonic stage of the mother or of the father, and that one cell formed the prime rudiment from which they emerged.

All this teaches us that there are real transitions from unity to multiplicity, and conversely, not only in the region of the organism, but also in that of the soul.

But now it cannot well be the case that "souls" and organic totalizing forces split up or amalgamate; and it must also be remembered that the impregnated ovum which furnishes the material for an organism is the result of the contributions of two organisms; accordingly, the clearest manner in which the facts before us can be formulated is, perhaps, to say that everything that partakes of the nature of *subject* and of *soul* is, so to speak, drawn from a great reservoir, and is manifested as a numerical multiplicity in accordance with the given material conditions to which experience shows that it is linked.

In the psychic region proper we meet something similar in the so-called dissociation of personality and in their cures; for example, a body may exist together with the *one* soul which belongs to it, but nevertheless two or more ego-subjects may also belong to it, and the manifestations of these may alternate in time.

There is thus a great reservoir of personalities from which all ego-"individuals" and all "persons" are drawn.

Now what does this great reservoir of subjects look like?

III. THE "BEYOND" AND DEATH

At this point we will call a halt and ask ourselves whither we have been led, for indeed we have strayed into strange regions.

Our plan was to describe the most essential characteristics of the real in the midst of which man has his place; and we particularly emphasized the importance of knowledge and of totality.

But where are we now? In view of our "reservoir" of "subjects", are we in this world at all? Are we still at our task of discovering the foundation of the "phenomenal" and the "empirical" world?—that which, so to speak, lies behind it, and which, in so far as my knowledge comes into play, can be apprehended only as it is "in itself".

Is it not rather the case that our one reservoir of subjects lies *beyond* the world, and not only "behind" it?

In that case, then, our natural man would have been right in this connection too? Such is indeed the case.

Not only was he right in speaking of a real, which he knew to stand over against himself, and in raising the question, when he became "critical", whether this real "is" in fact such as he apprehends it to be, and whether behind his world another world of the "in itself" exists. He was right *also* when he assumed a "beyond" of this world. Without really intending it, we have been absolutely compelled to admit that he was right here too.

It is true that we have not yet touched upon the great question which drove natural man to the Beyond. Perhaps it is significant, however, that, without touching this question, we have been led to the very point to which

it led natural man. Surely this is the best vindication of the concept of the Beyond.

We now proceed, however, to raise the question of the Beyond in connection with that great problem which led unsophisticated man towards it, namely, the problem of death.

We know already that the problem of death was the birthplace of all religious doctrines and probably of religion itself, and of all metaphysical doctrines in the narrower sense. But here an honest philosophy can tell us very little indeed.

It is clear, indeed, that everything that can in any way be called *knowledge* and *totality* is indestructible, for both contain a fundamental characteristic of the real. If we elect to call this a *divine* characteristic, then this discovery also settles the fate of atheism in the proper sense of the term.

But man is particularly interested in his own dear ego, with its wholly personal store of recollections and experiences. Is this "immortal"?

Hitherto, philosophy has given no definite answer to this question. There is certainly no evidence against personal immortality in the ordinary sense in which it forms a part of the dogma of Christianity, for example, and of Mohammedanism. But also no fact is known which is immediately and quite exclusively in favour of this doctrine. For it might be that there exists a general immortality, that is, a great and supra-personal Super-ego, from which every ego came and into which every ego will return after it has been extinguished as a personal ego. An intermediate entity is also thinkable: a super-ego out of which every ego came and into which

every ego will merge again at the same time, preserving its personality in the Super-person in a manner which remains mysterious to us.

For we are here faced by something which is in principle quite mysterious, and we are therefore forced to admit an unlimited number of possibilities; for example, there might be a non-temporal form of existence of the real, possessing, for the multiplicity which it contains within itself, a range of relations the scope of which is quite unknown to us.

After all, the "Beyond" is a second mode of existence of the real by the side of those modes which are experienced in the form of appearance by "egoes" in their "world". Death is the transition from one mode of existence into the other, and "birth" is the same event in a converse sense.

Spiritualism as a doctrine has not yet a truly scientific foundation. Nevertheless, experience offers us many events which are explained best, that is, in the easiest and least artificial manner on a spiritualistic basis. We may disregard every kind of so-called "ghost" and every so-called "phantom" as probably still in want of a further light, although even these demand very serious investigation and consideration; but there are pure soul-events in so-called Psychical Research which cause the spiritualistic doctrine to appear debatable, to say the least, quite apart from the fact that this doctrine contains no logical contradictions whatever in itself, and thus is perfectly sound potentially. Among these I count before all the fact that a so-called medium has a supra-normal capacity for making statements which at the same time has (1) extraordinarily strict limits and boundaries, and

(2) has an elective and personifying power. The statements of the medium frequently relate to things which he cannot possibly know in the normal course of events, and all of which belonged to the range of knowledge of a certain dead person who in most cases was never known to the medium. The facts of telepathy and thought-reading may here be urged, but they afford no more than a forced explanation.[1]

Here we must simply wait; there is no other course. The study of Psychical Research (unfortunately it is still called occultism everywhere) is on the right path, and is being pursued in the most critical manner. The number of its dogmatic opponents—they are generally materialists of the old type—grows less from year to year. In this region it *might* be possible to effect the true demonstration that the personality which is manifesting itself in the behaviour of a so-called medium is identical with some dead person; although even then (as Oesterreich said on a certain occasion) it would not be absolutely certain that the dead person exists as a person apart from the conditions of the experiment, and has not been caused by these very conditions to emerge from a Super-ego in which he had been merged. Still, personal immortality could attain a certain degree of probability on a basis of the experiments of students of psychical research. And it is possible to imagine phenomena which would render its existence almost certain.

IV. RELIGION

As men are constituted, they cannot concern themselves with the problem of the Beyond, and, more

[1] For further details see my essays in *Zeitschrift für Parapsychologie*, 1927. C. also the works of Bozzano and Mattiesen.

especially, with the problem of death, without experiencing a powerful emotion—that of dependence. There are other facts besides death which serve to show them how dependent they are on that great Reality of which they form a part, such as error, disease, and especially lack of moral force, of which latter we shall have occasion to speak later. The *dualism* of the world, the fact that we are bound to the realm of matter, which is the realm of imperfection, here causes us to suffer, and we desire to be released from our bondage in that which is alien to our spiritual nature.

But still "death" remains the greatest enigma and the most powerful cause of emotion.

This feeling of dependence, which is rooted in knowledge and belief and is closely bound to them, together with the feeling of suffering and the desire after release, may be called the "religious" feeling; and, if we give them this name, then the world-view of the critical man ends at the precise point where that of the natural man had ended, namely, in *religion.* But such a religion will be no enemy to knowledge; it will be saturated with knowledge, with genuine knowledge and with scientific belief, and will differ in this respect from almost every church-religion, except perhaps primitive Buddhism. For it cannot be asked of critical man that he shall believe in a dogma which neither has nor ever can have a foundation in knowledge.

But the religious feeling based upon knowledge and upon reasonable belief is not only a feeling of suffering and of dependence—it is also a feeling of trust, of security, and of love; and accordingly love based upon knowledge—the *amor intellectualis dei*—becomes the

highest of states and the last word of philosophy, that is, of human apprehension of the nature of reality by thought.

V. ART

Now man can apprehend the nature of reality otherwise than by means of thought; he can lay hold of certain of its essential characteristics and place them before his consciousness in a form which can be intuited.

If he does this he is *artist* and not philosopher.

The faculty of apprehending something essential in an intuitable form is the real and fundamental property of artistic man. Hence it is also essential to the artist in the narrower sense, that is, to man as the creator of works of art; and no skill in creating can serve as the substitute where this fundamental property is lacking.

A man can have artistic gifts without being an artist in the narrower sense of the term. In this case he apprehends the essence, or the "type", in natural intuitable objects, and also has the faculty of understanding works of art proper.

This kind of intuition is something different from the intuition of philosophy, and is yet allied to it. The philosopher too apprehends the ultimate essentials of reality with which he is concerned in an intuitive manner, in so far as he apprehends these essentials within that which is given to him in the shape of objects.[1] His

[1] That which we have here called intuition is, of course, not meant to be a plea for an alleged non-empirical intuition of the real (and of the empirical), or for an "intellectual intuition" or "mysticism". Only logical and mathematical meanings and their complexes are intuited in a non-empirical manner, that is, only formal entities; but even here it is only a matter of quantity, for even here at least one empirical instance is essential.

intuition tells him *that this is so*, and there is no reason nor derivation for this fact. If he could find a reason or derivation, the fact would no longer be an ultimate fact. In this sense the philosopher apprehends intuitively the axioms of geometry, the first principles of logic, the causal forms of Nature and other matters. Intuition here means merely an immediate awareness that a fact *is* and is in a certain manner, and this awareness follows upon experience.

The artist apprehends things through his senses. Evidently he can apprehend only that which has a sensorial expression in the world, either in that it is apprehended immediately by the senses, or in that it finds in the sensuous an expression which is indirect, and perhaps no more than symbolical.

The artist gives the name of *beautiful* in the widest sense of the term to an individual object if it gives a pure representation of one aspect of the real which can be expressed in an intuitable form—if, so to speak, although it is a single object, it is the representative of this side of the essence of the real. It is always the case that one *single* object is here concerned, and Kant was right in saying that all æsthetic judgments are in the logical sense "singular" judgments, that is, judgments concerning individual things.

Now the form of a tree or of animal may be such as to give it immediate beauty; the facial expression of a man may be beautiful in a derivative way as an indication of one aspect of his inner life. A peaceful landscape or a stormy sea may be beautiful as symbols: they are beautiful as the symbols of the sentiments which they excite in men.

Now the true artist does not only see beautiful types

in reality: he causes beautiful types to be in reality. These are called works of art. At first they exist in his fancy only: they are like the contents of dreams—but of waking dreams. After this he gives material execution to that which he has dreamed, and of course it is requisite that he shall have the skill to do this. This he can learn, at least to a considerable extent; but the essence of the matter he cannot learn.

It goes without saying that the work of art is always an individual thing.

Within the realm of the intuitable the artist is the seer who sees the nature of a thing, and he sees with his fancy. Here again that which he intuits may be something which immediately represents one aspect of the essence of the world, or it may mediate by pointing to an essential aspect of the essence of the world, or again it may be a symbol.

All art that confines itself to the relations of space and of time, and possibly also to relations of sound (like architecture and the art of decoration and a part of sculpture, painting, and music), is part of the first group. A great part of sculpture and of painting belongs to the second group, namely, everything that offers an intuitable representation of the inner life. The art of speech and the whole of music belongs to the third group, except indeed in so far as mere rhythm and sound play a part here.

Music, however, occupies a special place, since it is symbol without any interposition of thought. The fact that music exists at all, that is, that an inner life can be expressed by means of sounds, is a great enigma. This, however, is the fact. However true it may be that a great

part of our musical symbolism is based on mere convention (for even sharp and flat have not the same emotional value for an Oriental that they have for us), the fundamental phenomenon does remain that complexes of sounds are the symbolical expression of the inner life.

Schopenhauer has assigned to music the highest place among the arts: according to him it represents the fundamental principle of all things proper (namely, the will) in a symbolical manner, and all the other arts are no more than examples of the particular forms in which the ultimate Real appears.

I should like to put the expression "the element of the soul" in place of "will". Even then music still is the expression of the highest with which we are acquainted, namely, spirit.

Although art and philosophy travel by different paths, they meet in the ultimate. Each is an apprehension of the Real, and both culminate in the Spirit of Religion. I do not speak here of poetry, for poetry is expressed by means of words, and therefore is always a mixture of art and of philosophy proper. I am thinking of such things as Michael Angelo's frescoes in the Sistine Chapel, of Fra Angelico, of the "Ninth Symphony", of the "Magic Flute", of "Tristan", and of "Parsifal". These are examples of *amor dei*; but it is not an *amor intellectualis*, not a love of the highest based upon knowledge. But it is an *amor* which is based upon an immediate apprehension of the essential.

And thus, if we give the name of "intuitive" to every kind of immediate apprehension of the essential nature of that which is experienced, then philosophy and art are united in *amor intuitivus dei*.

C. MAN AS A MEMBER OF THE UNIVERSE

I. VOLITION

MAN as the *observer* at first stands over against the universe, and it costs him a long and difficult process of thought before he knows that he is a constituent part of it; for surely "the universe" cannot exist and something else "as well". But man as *agent* stands in the world from the beginning, and is immediately a part or member of it. Action means that I determine events in the world according to my will.

This is true of all men—of the man who is wholly "natural" and of him who is wholly civilized, and it is even true of animals—certainly of those which we are in the habit of calling the higher animals.

1. KNOWING AND WILLING

Another thing, too, is true of man and of all the higher animals, namely, that they can will and can act only when they know. For to act means to determine the flow of the events of the world by one's own authority, and this is possible only where there is knowledge of the situation of the moment and of the universal laws of Nature, it being assumed that these laws will prevail into the future. Such a knowledge of the rule of law, or if we wish so to say, of the *essence* of the world, may be extremely rough and unanalytical. But where there is none, there action is impossible, and exactness of action is commensurate with exactness of knowledge.

Even the primitive man, the so-called savage, knows that the arrow which he has let fly from the bow will go

through the air, and will either hit the deer or will fall on the ground without hitting it. Experience has taught him this, and he has never yet been disappointed in his expectation that experience is valid for the future. Between the knowledge of nature of the savage and the professor of physics who demonstrates before a learned society some subtle experiment in electricity there is a difference of degree, but of degree only.

The savage lays hold only of coarse bodies, the physicist of electrons. Both, in a figurative sense, lay hold of something, and both are acquainted with the laws of that of which they lay hold, and rely upon their validity.

Both, further, will something, and both have the faculty of doing what they will; and in both the scope of will is proportioned to knowledge.

All this seems quite simple and obvious, and the question whether it all really is so obvious, and what is the exact meaning of it, is not generally asked until a fairly late stage of civilization is reached.

But when the question is asked, the difficulties which face us are quite astounding; for the first question is, *who* it is that wills and *who* it is that acts. We may add at this point that action in every case is to be traced back to some movement of my own body, whether of fingers, or arm, or leg, or also, in speaking, of tongue or of larynx.

2. Willing and Acting

Who is it then that wills, and who is it that acts?

The naïve answer is "I". But this answer is far from being clear.

For the question is, who is "I"? Is it that curious piece

of matter which I call "my body"? It is certain that this consists of matter, since it weighs so and so many pounds and is capable of giving and receiving impulses, and it is also certain that it is an organic body and has its nearest relative in the bodies of apes. Is this the "I"? Surely that cannot be the case, for if it were the case I would not call it "my" body, since that is intended to indicate that it belongs to me, that it is my property, and that I possess it.

But who is "I"? There are philosophers who tell us that the ego does not exist at all, and that "Ego" is simply the name for the sum of all my experiences and of the totality of my stock of recollections. But here too that little word "my" has crept in, pointing once more to property, ownership, and possession. We do not want the ego, but it keeps on turning up. Is it perhaps the case that this is inevitable? And what is the meaning of "ego"?

The answer is quite simple once we have thought out the matter to the end.

I simply means—I; and those who fail to understand this cannot be helped, and it is no more possible to explain a problem to them than it is to explain to a colour-blind person the meaning of red and green.

I am I. I am he who consciously possesses everything —his experiences and his stock of memories and his body, and who is at the same time conscious of the fact of his possession. To formulate it quite rigorously: I am the self-conscious point to which every kind of possession is referred; the *Self*-consciousness must be carefully noted; *I* am no empty logical ghost.

We learned something similar already on page 32.

Now we recently asked the question, *Who* wills and

Who acts? This question seems now to be answered, since this "who" must surely be the ego, in the sense which we have definitely settled, although we were unable to define it.

But our question has been settled only in appearance, and indeed the graver difficulties only begin at this point.

The question Who wills and Who acts? looked as though it were one. Perhaps there really are two questions, and perhaps the decision which we have reached about the ego answers one only of them.

The correctness of the "*I will*" is probably beyond doubt. It means just that I have certain experiences which I call will-experiences. I will, for example, to fetch a book from the book-case.

But is it now the case that I go to the book-case to fetch the book? Surely it is not the ego of which we have just been speaking which "goes". On the contrary, this ego experiences that somebody else moves his legs and his arms, after "I" have passed through the act of willing, and this "somebody else" is, precisely, my body.

The sole correct formula is, then, "I will and my body executes". But does this allow us to say further that my body *acts*?

What are the various steps which are and which must be taken in order that the book shall come into my hand?

The natural scientist can give us information here. A part of my cerebrum, the motor centre, must be stimulated, nerves must be irritated, and muscles must be contracted.

In any case, as we have already shown in another place, although from a different point of view (p. 71), I have

no knowledge whatever of these things otherwise than as natural scientist, nor do I will to do them; all that I will is to have the book in my hand. Yet all these things happen after I have experienced my will to have the book in my hand. My body executes them; but who "does" them with my body as instrument? Who is the agent proper, since in any case it is neither "I" nor my body as a material structure?

We said above that a more or less exact acquaintance with the laws of Nature was essential in order that we should be able to will, that is, to apply them. Any child can will to fetch a book; clearly nothing is required for this except a knowledge of the two laws, "my legs can move as I will" and "my hands can seize and hold firm objects".But far more numerous and intimate laws must be practically applied in order that all that is willed shall in fact come about. We mention once again stimulation of the brain and of the nerves and contraction of the muscles. Who "knows" these things, as they are known, even where a child or an uninstructed adult is acting? Clearly somebody must know, and that in no superficial manner, but in such a way that he can apply all the most intimate laws. Even the natural scientist does not know the most intimate laws, and even his conscious ego-knowledge proper is quite terribly inexact in spite of science.

Now we have already learned that organic bodies are no machines which run by themselves, but that they are governed by a vital factor which is of the nature of a soul. Every organic body has a factor which governs it in this manner. Therefore my body too has such a factor.

We finally conclude then that we may say that, when

I will a thing, then the agent is the vital factor of my body, which at the same time knows in every detail how it must set about this in conformity with the system of law which governs Nature. Here its knowledge excels "my" knowledge very considerably; for even if I happen to be a natural scientist my knowledge about the stimulation of brain and nerve and the contraction of muscles is very indefinite, and I have not the faintest idea of all the things which must happen to all these organs in order that in the end the muscles of my fingers shall be gripping the desired book.

The case then is that I will, and that the vital factor of my life acts. When I will, then this vital factor executes in all its details that which I have willed, the technique of which is wholly unknown to me, using my body as instrument.

What is most important in this conclusion which we have reached at last is, then, that I will, but that I do not act. "I will and it happens" is the first formula, "I will and the vital force of my body acts" is the second and profounder statement of the actual facts.

For the conscious ego there is a gap between willing and acting. I do not experience myself as acting, although I am fond of speaking as though I did.

The great Scottish philosopher, David Hume, was probably the first to see all this quite clearly. In this book we have already touched upon this exceedingly important matter from a different point of view, when (on p. 71) we mentioned the fact that *my* knowledge does not constitute for the knowing Real a complete knowledge of itself.

All my experience is thus a kind of possession. For

the time being we will leave the matter there, reserving to ourselves the right of making a small correction at a later point—a small, but perhaps a rather important, correction.

So far we have been speaking of will which discharges itself in outward action. But, as we already know (p. 72), there is also a will which is turned inwards: I will that a name shall come to my mind, or I will to solve a problem in arithmetic. It is said in this case that I "reflect". But it is easy to show that here too *I* do not act. I wait until a name "falls into" my mind,[1] as the German language aptly says; but here again it is somebody else who causes what is necessary to come to mind, for example, the solution of the problem, only in this case, where we are dealing with my inner life, I call this somebody my soul. We are already acquainted with this (p. 41), and we also know that we may identify it within the sphere of the real with the vital factor of my body (p. 71). For the rest, we now once more postpone the thorough investigation of the relation between conscious willing and unconscious acting, for in order to be able successfully to analyse this relation in all its detail we must first acquire other knowledge.

3. Experience and Event

I will, and it happens.

Now what are the various things which can happen at the behest of my will? That is to say, what are the various things which the unconscious vital factor of my body, which partakes of the nature of soul, can do with express reference to my conscious will?

[1] German *einfallen*, literally to fall into = "occurs"

It is certain that the vital factor "does" many things without being in any relation whatever to "my" will.

For example, it made my body, while it was developing from the ovum in the body of my mother, without reference to my knowledge and will. It can also effect all my digestive and secretionary functions without reference to my knowledge and will, and it can also effect the healing of wounds if my body is injured.

(*a*) *In How Many Ways are the Two Connected?*

Let us now enumerate everything that can happen in my body in connection with my conscious experience, and especially with my volition. We know already that the expression "in connection with" must not be allowed to mean that *I* effect these events in a conscious manner. All that we wish to convey is that they always happen after I have had a certain experience in a conscious form. And here (as our words have already indicated) we will take our task in rather a comprehensive manner: we will enumerate everything that ever occurs "in connection with" a definite conscious experience; that is, we will pass beyond the scope of conscious volition proper in the narrower sense of the term. Thus we shall always have to state what kind of definite experience precedes the operation of the vital factor of my body, experience and operation being always co-ordinated in a fixed manner.

The first events which we must now discuss are the processes of stimulation of the brain and of the nerves and the contractions of the muscles of my limbs. We know already that these events do not take place at the behest of my volition proper, and we repeat that "I" do not

"will" these events, but only the realization of the final effect, like taking hold of a book or writing a letter. It is this primary and trivial matter which at the first glance appears to be the sole function of the vital factor, a function which takes place in connection with definite experiences, which in this case are will-experiences. We shall soon see whether it is in fact the sole function of this kind.

In any case it is certain that this first group of events, which are firmly linked to experiences (experiences which plainly are of a volitional kind), is in practice the most important of all. Here man is master of Nature and makes it his slave, and further, within the field of Nature makes slaves unto himself at his own will. These slaves are called *machines* in the widest sense of the term—those slaves whose end is to take over the heavy labour of man and to make his labour as profitable as possible. In order that he shall be able to will all this, man must have knowledge of the laws of inorganic nature. The laws lie ready, and are apprehended by knowledge, and are not made. If Nature did not show that it is governed by law, if it did not show "cases" of events ever recurring under the same connecting rule (and this is quite thinkable), then practical science would be impossible. But man is master in a certain measure also of organic nature, and in fact just so far as he knows its laws too. Now he knows the laws of physiology and of hereditary transmission. Accordingly he can, as physician, exert a favourable influence upon a man's life by stimulating the healing force of organic nature—(it is Nature who really heals and not the physician). Or as breeder, he can call into existence breeds of fowl, cattle, or horses as he pleases

(but here too the most important step is taken by Nature).

In short, there is no field in which it is more apparent than in this that knowledge is power.

The second group of facts in which experiences and body-phenomena are connected is so-called psychical secretion, a phenomenon discovered by the Russian physiologist Pavlov. If I am hungry and smell the fumes of food, then the salivary glands and the glands of my stomach begin to secrete the digestive juices. This fact has been experimented upon with great care in dogs, and it has further been discovered that this event obeys the so-called law of association of ideas. If a bell is allowed to sound every time immediately before a dog is given his food, then after a little time "psychical secretion" begins as soon as the sound of the bell is heard and without the food ever having been smelled. For the rest, the effect of the food which is smelled rests upon association too, for the dog must know that a food which smells good also tastes good. Evidently here the experience which involves a subsequent body-event is no kind of volition, but a sensation; in its implications it is an image, that is, a picture of fancy.

The third group consists of certain body-events which occur most clearly in the state of so-called hypnosis, but can also occur, as has recently been discovered, apart from this state and as the result of mere "suggestions", and even of auto-suggestions without any external assistance. It is possible to cause by auto-suggestion inflammations of the skin, although only in a slight degree, and by the same means to stop hæmorrhages and to influence menstruation and digestion, and even to

prevent colds and more serious diseases. Here then the physiological functions of the body are being changed subsequently to—and not "by means of"—a conscious experience. The conscious experience, as we have been taught (more especially by Coué), is not a kind of volition, but a kind of imagination to which must be added the firm conviction that that which is being imagined will really come about. Thus that which is experienced is not "I will", but "It will happen". And thereupon it does happen, and that which brings it about is the vital factor operating upon my body. The things which are here at length comprehended in a scientific form are some most ancient and others most modern; the practices of Indian Yogis and of Christian Science are at bottom the same thing in a religious form.

Fourthly, and, so far as we know at the moment, lastly, we must mention the material events which occur subsequently to conscious experiences—that is, so-called materializations and all that is connected therewith, for example, the movement or raising of distant objects ("telekinesis", "levitation"). There still are people who deny the existence of these facts because they do not fit into their view of the world; but that affects the reality of these events no more than the antipodes were affected by the Church's denial of their existence, or the inventors of railways by the fact that a Professor of Physics "demonstrated" the impossibility of railways. A true logical demonstration and a true logical refutation are possible only in the sphere of mathematics and of pure formal logic, for example, in the theory of the syllogism. Those who apply such methods to empirical events are dogmatists; time simply passes them by. Now, materiali-

zations are nothing but a certain step beyond the merely physiological effects of suggestion, for in this case we are not dealing with any action upon blood-pressure or digestion, but with a new morphogenesis, or an embryology that has been taken up afresh. Even the latter consists in nothing other than the fact that the vital factor draws within its sphere of action by means of the process known as metabolism, a continuous supply of fresh matter to which it gives a form. We can give an analogous interpretation to materialization and similar phenomena; all that happens in such cases is that the vital factor extends its grasping and formative influence further than it does "normally", and matter exists everywhere. This is true at least of such abnormal morphogenetic events as happen in connection with (that is, emanating from) the body of a medium; and of such alone we are speaking here. Now the abnormal morphogenesis is distinguished from the normal as we meet it in embryology and regeneration, by the fact that a conscious experience is intercalated in the series of events. And this experience, exactly as in the physiological effects of suggestion, is an image or picture of fancy, and not a volition proper. Here too the principle "it will be—and it is" is valid. But it is true that so far at least there are not many men who are capable of the realization of such things.

Our enumeration seems to show that volition proper plays a part only in the first class of phenomena which we set out, that is, in the sphere of acts of will proper; everywhere else, when the conscious experience which seemed to be in play met us, it was in the shape of images and not of volitions.

(b) The Connection Between Volition and Event in Particular

But, after all, this is not the case. The justification of these words will be made clear by an extremely simple consideration, but one which will be of great importance for all that is to follow.

The only reason why it appears as though it were only the conscious experience[1] of an imagination which is operative in all the kinds of suggestion which we have been enumerating is, that this experience is in fact the last conscious experience and is immediately followed by the activity of the vital factor. But it has invariably been preceded by another conscious experience, namely, by the *resolve* to suggestion or to auto-suggestion, that is, by the will to enter into the method of suggestion or of auto-suggestion; and especially the resolve to hold fast an imagination, when it occurs, as long and as clearly as possible, and to be convinced of its realization. To this extent will has always played a part in the various phenomena which we have enumerated, although volition seemed to have no part in them. The only possible exception is the psychical secretion discovered by Pavlov; but it is not necessarily an exception, for I may will to have an imagination relating to some food, and when it has come the glands of my body begin their secretion.

With this result we have at the same time reached understanding of a new kind of "action of volition" (to use the current form of speech for once); if will can

[1] I am well aware that it is superfluous to add the word "conscious" to "experience", that it is a pleonasm, as it would be to add "chestnut" to "roan". But then there are, first, people who speak of that monster, "unconscious ideas", and, secondly, we cannot use the word "conscious" too often in this section.

excite images, then evidently it can act not only upon the vital factor of the body, but also upon the soul and upon the course which soul-events run. (The latter form of action is, as we know, only apparent.) Now it is true that from the metaphysical point of view the vital factor and the soul are the same (p. 71)—they are subjects of knowledge within the real. But empirically there is a sharp distinction between the realm of Nature to which my body with its vital factor belongs and that of the soul, which is the foundation of my inner life.

We are thus faced with the task of investigating the (apparent) effect which the will can exercise upon the course of the inner life, that is, upon the soul, a task on which we touched briefly when, on page 72, we spoke of the so-called inner act of will.

Now here the first thing which is valid for normal and conscious, as well as for suggestive and auto-suggestive life, is so-called "inner volition" proper. I experience certain "tensions" which are hard to describe, and which, in this case, represent the events of will; and thereupon images occur, which remove the "tension". This very indefinite word is here used intentionally. For example, when I wish to solve a mathematical equation, I experience the tension between the task (which may be pretty complicated) as given in the book, and the general formula required for the solution, which resembles an empty frame for which a content is to be found.[1] I "will" the

[1] Those who are trained in mathematics should consider that an equation of the second degree must first be reduced to the form: $x^2 + ax + b = 0$, and that the solution has the form $x = -\frac{a}{2} \pm \sqrt{\left(\frac{a}{2}\right)^2 - b}$. The task is ultimately to determine a and b from the equation as it is given in the book.

solution, and thereupon the images "arrive", which, if all goes well, bring me nearer step by step to the solution. Or I will to remember the name of a certain German Emperor which I have forgotten, and try to recollect it. What I know is, "a German Emperor about the year 1000". Next I remember that he was a member of the house of the Ottos. Which one? Stop—it was Otto III; that is the right answer. But "things" do not always go so well. What is really "willed" here is the conscious possession of an image, and it follows upon the experience of a volition, and is "made" by the forces of the soul.

I can also will to be attentive, and if I do so my soul is more or less attentive, which simply means that it places before me one and the same object (whether it be intuitable or not) with a great deal of accuracy. This volition and this effect also play a part in the first stages of auto-suggestion: I will to maintain quietly and for a lengthy time some image which has a flavour of faith, and it happens so. Here too, of course, that which is willed consciously is executed by the forces of the unconscious soul.

The second possible object of my volition with regard to my inner life is derived through the first. The meaning of this is that my volition is now turned upon some part of the circumstances of the soul as such, and not, as above, upon some particular and conscious event, although this too, of course, passes through the soul. I will to rid myself of all kinds of inconvenient traits of character and substitute better qualities for those which have been found bad. Strictly, of course, it is not I but my soul which has these characteristics, so that that which is willed here is a change in a permanent state of

the soul, and not, as above, a temporary function. Now in this connection I know in the form of a "law" that I must first experience attentively an image having the flavour of faith. In spite of his practice an actor, however experienced, is afraid of going on the stage, and in a semiconscious state tells himself again and again that he will be pleased to-morrow to face the public. And this happens in due course, and his "soul" has undergone a permanent change. Something similar is true of the schoolboy who has to recite a piece of repetition, and of a man who is plagued by an inner unrest. Those who have religious faith call this "trust in God".

Here that which is popularly known as force of will is strengthened; and here the discovery of Coué is of incalculable importance, even for educationalists who generally disregard it. The discovery is to the effect that volition proper must not be allowed to come into play. It is true, as we know, that the resolve to auto-suggestion must be the beginning of the process; but that which must be willed immediately is that there shall be an image having the flavour of faith, which in fact generally arrives and in turn brings with it that which is the ultimate term at the background of volition, namely, the change in the character. This ultimate term, however, must not be willed in an immediate manner. If I tell myself that I *will* not be afraid, or that I *will* be calm, or, in short, if I exert my will in this sense, then the result is the precise opposite of that which I willed. Thus force of will is acquired by means of the exclusion of will proper, except for the very first resolve: an education solely by means of imagination and faith. Those who are acquainted with the theories of Freud will see that we have here the

counterpart of his procedure: Freud's procedure removes dangerous complexes, while Coué creates advantageous complexes. All this is "done" by the unconscious soul.

The kind of volition which brings about the hypnotic state of the soul in general without reference to any modification of the character is, of course, one member of this group of effects of the will. I will this state as a state to arise, and I surrender myself to it. All that I must will immediately is concentration upon an image, that is, a restricted attention; as soon as I do this, the state with all its consequences supervenes. For the rest, all this resembles exactly that which happens in ordinary sleep. Sleep too may be willed, and I know very well that I must follow the instructions of Coué: if I will *immediately* to sleep, then it is certain that I will not sleep; but I may safely will that of which I know that it induces sleep, for example, I may surrender myself to an intuitable image of fancy. Then sleep, thus willed in an indirect manner, comes of itself.

In this region too, which is concerned with the relation of the will to the life of the soul, we meet a third group of certain rare and "abnormal" events. We met similar events on a previous occasion (p. 97). The group in question comprises psychical events (in the narrower sense)—parapsychological and so-called "occult" phenomena, that is, telepathy, thought-reading, and clairvoyance. It is true that in many cases (those called spontaneous) no conscious volition at all comes into play: it is simply the case that the man with supranormal gifts is at certain times "mediumistic", whether he wants to be so or not. But wherever the so-called state of trance is a necessary pre-requisite for the mani-

festation of mediumistic capacities, there the transition into this state must have been willed, that is, the person having supra-normal gifts must consciously surrender to this state, whether he suggests it to himself or allows another person to suggest it to him. All the rest thereafter comes "of itself". Everything is thus quite similar to the will to suggestion which is based upon a normal mentality, but while the immediate act of will, the resolve, is the one term which occurs in every case in the same form, the consequences of it are different by reason of the supra-normal nature of that which is suggested.

All the relations between volition and the soul-events which have been discussed in this section are rather complicated matters. It is extremely important that they shall be understood clearly, and therefore I resume all that has been said at this place from a new point of view.

I have repeatedly spoken of an "immediate" act of will which comes into play here. Hence presumably there must also be an act of will which is not-immediate, or mediated, or, rather, one which is mediated by immediate volition; and such an act does in fact exist. The attentive reader will already have noticed this, for example, where we speak of that ultimate term which stands in the background of volition. But it will be well to give especial emphasis to this fact once more.

One single act of will (which is difficult to describe) comes into play only where a task is to be solved or a name to be recalled to memory. Subsequently to this the forces of my soul are active for a moment and present to me in conscious form the answer of the problem or the name which had been forgotten.

Everywhere else there are at bottom two acts of will, which for consciousness, if the term be permitted, interpenetrate each other. Even the will to attention is at bottom twofold: I will to have an image and I will to retain it clearly for a lengthy period. And this means that I will a momentary activity of my soul *and* a state which endures in it for some time, which state I call in popular parlance "my" attention.

If I will to reach a hypnotic or semi-hypnotic state, then it is precisely this which I will as ultimate end, or, if the expression be preferred, by way of background, whether my reasons be purely scientific, i.e. in order to study the phenomena of suggestion, or because I wish to put myself at the disposal of parapsychical phenomena (if I happen to be a medium), or in order to effect a change in my character. But in the foreground all that I will is to hold fast an image for a lengthy period of time, for I "know" that this leads to that state with all its consequences.

The analysis may be carried even farther, in which case three or even four facts which are subordinate to volition will be discovered. First, I will to have a conscious image; secondly, I will to have it for a lengthy period, which is effected by means of attention but without any particular effort; thirdly, I will the hypnotic state; and fourthly, I will its consequences. We have here the relation of means and end; in our enumeration each prior object of volition is a means to the realization of that which follows. But only the very first term, that is, the first resolve, may be willed expressly or immediately; if any of the further terms are willed with any degree of exactitude or effort, the whole process fails.

Thus the later terms must stand quite in the background of consciousness, and especially of volition, and even the first must exist merely as a simple resolve.

Everything differs considerably from the external act of will which aims at movements of the body (p. 111). When I will these I will merely the ultimate term of the whole process, for example, to take hold of a book; or rather, the ultimate term is the reading of a book or even the knowing of its contents. "I", as natural man, here know nothing of the intermediate terms; it is the vital factor of my body which knows them (stimulation of the brain, nerves, and so forth). I, as natural man, know a little more of the volition which relates to the soul: first comes attention, then the hypnotic state, and then its consequences; but here too I do not know "how it is done". I only know that it *is* done, precisely because I know certain laws. We see once more (p. 104) how all volition rests upon knowledge.

(*c*) *Volition with Reference to Another*

One last section is now lacking in the chapter on the objects of my volition. I may will with reference to the behaviour of my body and of my soul. But I may also will with reference to other men, that is, ultimately, —as is immediately obvious—with reference to their souls. For that which I will is invariably some behaviour on the part of other men, and this, although it manifests itself in the body, depends ultimately, as I know, on the soul. Briefly, then, I may will to influence other human souls.

The ways in which I can influence other men follow immediately from what we have learned about the

influence of my volition on my soul and on my body. It is therefore sufficient to enumerate the various possible ways in which influence may be exerted.

The commonest way is by means of influence exerted through speech and writing, that is, instruction. I know that, if by this means I have instilled in the other person certain ideas, in the widest sense of the term, then his volitional acts, both external and internal, will depend upon that which has been instilled in him, provided that he holds that which has been passed on to him to be "correct" or at least "worth considering". Here, to use popular language, consciousness "acts" on consciousness, and significance on significance.

But I can also exert influence by means of suggestion, and in that case the other person manifests the hypnotic or semi-hypnotic state with all its consequences. These consequences are the real ultimate object of my "willing"; namely, scientific observations in the field of the theory of suggestion in particular or of psychical research, or again, a change in the character of the other person by means of education.

Here it is necessary to distinguish between two different matters, namely, the attainment of the general state which is a prerequisite of suggestion, and the particular content of the suggestion.

The first may be attained by means of instruction, that is, I can simply say to the other person: "Lend me yourself for purposes of suggestion, from reasons of a scientific or an educational nature".[1] If the other says "Yes, I will", then he has accepted the instruction, and

[1] The instruction may have the form of a threat: "Do this, or else. . . ." There is no need to enter upon this in detail.

will accept that which is to follow, as will soon be described. But it is also possible to surprise the other person into the state which is required for suggestion. It is practised in its crudest form when I simply make a dash at a person and say: "You will now sleep". The reaction of many people to this is the hypnotic state with all that follows upon it. The more subtle and properly educational form of surprise is that by which I attract the attention of the other person, evoke his interest, and then present to him one and the same image or one and the same process of thought over and over again, with a particularly keen, "pathetic", and "emotional" emphasis on the fact that this image or this process of thought is "good", "beautiful", or "correct", and that I myself am wholly convinced that it is so. The "interest" itself has created a semi-hypnotic state in the other person, for example, in the pupil; he has become very receptive.

This has already led us unawares to the second way. After all, I do not really will that the other person shall be in a hypnotic or semi-hypnotic state: what I want is the consequences of this state. And here I know that in this state (which may be merely a state in which interest is in tension) suggestion with reference to particular contents, that is, a faith in the reality of these contents, is attained without any grounds of a "rational" nature.

I pass to the other person a "hetero-suggestion", that is, I tell him that this or that thing is the fact; and he internally transforms this external suggestion into an auto-suggestion, and is "convinced" that things are as I have said.

Everybody knows from public exhibitions that the most extravagant things can be suggested. The other person can be "convinced" that he is Napoleon, or a little child, or a dog, and behaves in accordance with his belief. Or he takes salt water for good wine, or runs away from a bee which exists only as a hallucination.

In other cases the hypnotic or semi-hypnotic state gives rise to the manifestation of mediumistic powers. Here there is no conscious suggestion; but in thought-reading and in telepathy there may be a suggestion which is not known even to the suggesting person himself.

Such matters as those which we have just described can be used only for scientific or, possibly, for criminal purposes. But the hypnotic or semi-hypnotic state in the other person can, of course, be employed also for the purpose of genuine moulding of character exactly like immediate auto-suggestion as practised by Coué. I say to the other person: "You will lose your fear", "You will always be of a quiet mind", and so forth; and what I have said comes about. Here external suggestion is no more than a means to make auto-suggestion more easy; the latter is the chief aim, and can be attained by many people without any external aid. But our present topic is precisely the fact that I "will" suggestive effects in the other person.

Education is generally practised in our day, in so far as it is suggestive, without the educator or teacher being aware of what he really is doing. As a rule he has not the least idea that the state of "tense interest" is a semi-hypnotic state, and that the alleged instruction which takes place in it is in fact suggestion. The same is even more true of the preacher.

Ought this to be so? Ought not both teacher and preacher to have a much deeper training in psychology, and more especially in so-called abnormal psychology than in fact they generally possess?

II. OUGHT

Ought this then to be so?

What is the meaning of this? Surely we are here faced by a new question altogether.

We know now the meaning of willing and of action, and we know the range of our volitions which, having been willed, can be executed by our living body and our soul. But there has been no mention whatever of the fact that something *ought* to be willed or to be done.

It is true that the master, or the commander, or the man of powerful will in general, may say: "This ought (or is) to be done". But we are not now speaking of this "ought". Such an "ought" may be accompanied by threats, whereas we are speaking of the question whether this "ought" *ought* to be, and to transform itself into deeds. (This "ought" is nothing but the expression of the powerful will of a man, and our question refers to this and to any other will as it is in itself.) It is not the commander who commands here, but rather he is commanded by means of that which we mean by the word "ought".

The question of course arises who it is who here gives the command. Is an actual command given? A command surely requires two conscious subjects, and in this our "ought" there are no two subjects. After all, I am quite isolated when I experience that I "ought" or "ought not", "should have" or "should not have", and the same is true for every other man. If, on the other hand,

we were to say that we command ourselves, it would probably be difficult to give any perfectly clear meaning to this word. At most we can say that it appears to us and to every other man who experiences our "ought" as though somebody were giving him a command. The true fact of the matter is clearly that men, when they experience certain things or certain events, experience simultaneously that these things and events *ought* to be such as they are, or *ought* not to be such as they are. "I ought" and "I ought not" are probably no more than derivatives from this "it ought" or "it ought not", the derivation taking place when my own person with its will-experiences is made the object of contemplation, that is, the content of experience. My person, too, ought or ought not to be the source of certain events—this is at bottom the meaning of this "I ought".

It will be clear to every reader that that of which we are speaking here is *ethical consciousness* or the *moral sense*; here then ethical element enters into the theory of will and action.

Up to this point we have confined our investigations to the question about the forms in which volition and action in fact take place. We now are faced with the new question: how *ought* we to will and to act? And this question arises for every man, and the degree of education which he possesses is indifferent, although it must be admitted that the ethical judgments of a man who has a full mind may bear a more delicate stamp than those of the ignorant. This *may*, but *need* not, be so. For the ethical sense is an absolutely original and, so to say, instinctive gift, which, like a talent for mathematics or for music, is given to one man in a high degree and to

another in a low. Hence the influence of education and of knowledge upon the ethical element could be tested with rigorous accuracy only if we had before us both educated and uneducated men having an equally great ethical gift.

Every normal person has the ethical sense in some form, even the criminal; even the criminal often gives himself up, and that not only in order to make his punishment lighter. We found this sense already in our primitive man (p. 20). Like a capacity for logic and for mathematics, it forms a part of the very nature of man. For at bottom it is just a special form of thought, if by thought we mean the conscious apprehension of significances and their complexes. Thus in this sense so-called conscience is no more than a particular form of thought, and differs from other forms of thought only in the special strength of the element of feeling which accompanies it, especially when it is directed upon the person which is its seat. But certain tones of feeling go with every form of intellectual apprehension, as everyone knows whose fortune it has been to have lucid understanding of a difficult mathematical or factual complex; in that case too he is "pleased".

Ethical apprehension has one peculiarity which is particularly strong in my own volition and action: it is that the note of displeasure which belongs to everything that ought not to be is so much more intense than the note of pleasure which accompanies that which ought to be (that is, the *good*). We all know this; we know that the repentance for actions which do not admit of ethical approbation can pursue us for years and for decades, and even after the victim of my action has forgotten it,

and no evil consequences of the evil deed remain. This curious fact will be examined again at a later point.

It is not my intention here to write a treatise on ethics. This is a task which is equally hard and thankless. I undertook it recently, following an inner compulsion.[1] It is a hard task, because it is necessary to take into consideration an extreme multiplicity of facts from every possible field of knowledge if we wish to go beyond the barest generalization; and it is thankless because the main problem can at best give a certain satisfaction to the author himself, but cannot have any universal validity. It need not be assumed that the latter term hides anything mysterious. The question simply is: "Is it possible to write a treatise on ethics which goes beyond mere formalism and which will give to *all* the same satisfaction as does a clear mathematical demonstration?" The answer to this question is in the negative.

Almost all philosophers who have written on ethics, and especially one of the greatest of all, Immanuel Kant, have moved in the most general and vaguest regions; all that they have attempted to do has been to formulate clearly the significance of ethical experience in general without respect to its particular content; that is, to make clear the meaning of "it ought to be", or, with reference to the person of him who asks, "you ought".

But these investigations always moved in a circle. For example, when Kant tells me that I ought to act in such a manner "that I am able to wish that the maxim which governs my action were a general law", then the question immediately arises, ***when*** can I "wish" this, and ***what***

[1] *Die Sittliche Tat*, 1927, to be published under the title "Ethical Practice".

maxim can be the object of my wishes? The answer to this is, the *good* maxim, or that which ought to be. I myself at one time attempted another formulation which is in no better case. Kant, of course, proceeds to illustrate his proposition by means of examples. All these end in the rule that we are to do nothing of which we do not wish that another shall do it to us. But, taken literally, this is a very dangerous rule, for it might be taken to mean nothing less than that I ought to support those tendencies in another person which cause me pleasure when they are supported in me. And such tendencies may be exceedingly questionable. Of course the meaning is, do not do unto others what you would not have done to yourself because it is not *good.* But in that case we are once more at the point from which we started. What *is* good? The answer was: the good.

But, after all, surely the only question which interests us is precisely the question which asks *what* is good, that is, *what* I ought to do at this moment, in these circumstances, and at this place. The mere meaning "good" we have to accept in the same manner in which we accepted the meaning "space", which like "good" we know very well but cannot define.

Is it then the case that there is no answer to the main question of Ethics?

Let us first ask ourselves by what road we might perhaps reach an answer. Evidently there are two possibilities. First, I can form a view of the nature of the universe and of life in it in particular. I may imagine that the universe of which I form a part has a definite goal, and in that case I tell myself that I must work towards this goal, the assumption being, of course, that

the goal appears good to me, that is, as something that *ought* to be realized.

Here we are aground once again: What goal would be good in that event?

It is clear then that this way which leads back Ethics to metaphysical conviction may be useful in particular instances. But in the main matter it is of no use unless something else be added to it, namely, a capacity in us to have an immediate and clear apprehension of the good according to its content.

If we had such a capacity, it would be exactly like an instinct. We would be in a position to set up ethical axioms, that is, ethical postulates of a fundamental nature in the same manner in which in geometry we are able to set up the proposition that the straight line between two points is at the same time the shortest of all possible lines joining these two points. And these axioms would then be absolutely binding; no action under any pretence could infringe them and remain good.

The great founders of religions, and especially Jesus and Buddha, have set up such axioms and ordered their lives according to them. Schopenhauer set up axioms, but did not live in accordance with them; but he was aware of his non-compliance, and it was a source of great grief to him. In our day there are many who call themselves Christians, and find praise for the Sermon on the Mount, and then proceed to glorify war. One might compare them to mathematicians who are perfectly acquainted with the theorems of old Euclid, but on occasions, for example when they are engaged on a survey, apply an "alternative" formula if it happens to be in their favour.

The question then is whether there are any ethical axioms. I think that there are such; there certainly are such for me. It is true that a certain resolution is required in order that they shall be pronounced, for, after all, the truth *might* be quite different. To give a single example which has a place at the beginning of ethics: shall I follow an active or a purely contemplative life? I am told that I should be active in the service of others, in sharing their life, and not only their suffering. So be it. But suppose that the Indian doctrine is true, and that a perfect severance from the world and a complete disregard of its works is the highest state of salvation, and hence is a highest participation in the life of others, bringing about their salvation in a magic manner. Do I *know* which view is right? I do not, and my decision adopts that view which seems to me to be the least false.

And this is the case all along the line. All that I can do is first scrupulously to examine myself, and then to set up as postulates such ethical propositions as I can approve with a clear conscience. There is indeed one supreme postulate only which may never be infringed, namely, that that which I have asserted to be an axiom must be retained as such. Hold fast to that, and set everything else at nothing, even the laws of the State: "Thou shalt obey God rather than man". We all know him whose teaching and actions were inspired by these words, and it is indifferent here whether we hold him to be man or God.

Those, for the rest, who believe that they can draw an ethical gain for themselves from my ethical convictions are referred to the detailed exposition of my applied Ethics. Here I say only what follows.

In our day there is fortunately a certain unanimity of view among all civilized peoples with regard to the big ethical questions, and the influence of these peoples has brought about a similar unanimity even among those who are still on the road to civilization. The propositions are universally accepted that we may not harm, still less kill, our personal enemies, and that we may not steal, besides a good many others, like that which forbids revenge. Torture and slavery have been abolished. Corporal punishment has at any rate been greatly restricted. It is, of course, to be completely abolished, even for children, as absolutely as capital punishment is to be abolished. Social progress is taking place everywhere to prevent the exploitation of those who are powerless, whether physically or economically.

It is different in the sphere of so-called politics. The supreme task in my opinion is to fight the abuses of so-called nationalism. This implies no disrespect of the State; on the contrary, respect of the State must be demanded with extreme rigour; and I may even rejoice in the State and have affection for it; that is, if it is good. But the State is never anything divine. The earth-bound, sinful, and, in short, "dual" nature of man makes it a necessity and a means for the attainment of the highest; but it is never the highest itself. Thus the first place never belongs to the State, but to the ethical postulate, and this is the same for all men, for the spirit is one.

To-day war is to be condemned unconditionally and in all conceivable circumstances. For the only excuse—which would, however, be no justification—no longer exists, namely, savage invasions of which it is known that they destroy all.

The reason which demands this condemnation of war is not (at least in the main) of an economic nature, nor is it the argument of the "great illusion". Its moral rejection does not depend on the fact that so many of the "best" have been the victims of war, among them, perhaps, men of talent and of genius. Nor does it depend on the "horror" which every normal man experiences if he is told to kill, although this is perhaps an instinctive gift which may point the right way. The true ultimate argument against war is rather expressed in the simple words, "Thou shalt not kill", as is clear once we have grasped the meaning of "to kill". The meaning of "Thou shalt not kill" is that something must not be done, the consequences of which are wholly obscure, and for that reason *cannot* really be willed. It may indeed be argued that the purpose in war is merely to render the enemy harmless and not to kill him. But that, to use Kant's expression, is a wretched evasion, for it is known that the action *will* bring about death. Thus there is a conscious killing. And it is this precisely which ought not to be. Can anybody say that he knows the significance of this action? Nobody knows it. It is possible that the man who is killed is brought into a state—and this certainly is not intended—which is infinitely painful for him; perhaps he is not simply extinguished. It may be true, after all, that those religious doctrines are right which assert that the "future" of the man is determined by the fitness of his soul at the moment of death. This fitness then would be precluded. The act of killing may be a monstrous evil, and once more I say that this certainly is not the intention. But surely such considerations will give you pause before you kill.

The State is the harmonious order of mankind in the service of virtue, and in its perfection it is fundamentally One; for spiritual mankind is one, and all the talk of the various "nature" of the peoples is no better than mere talk, which often sounds big, and relies upon certain accidental facts of history, which are wholly contingent. It is true that there are different types of men: one extreme type aims at power; the other is ruled by love; but these types exist in every people.

The harmony is not complete in the ethical-logical sense so long as there is a multiplicity of States. The League of Nations is the first step towards that lofty aim. But it should be aimed at consciously for its own sake, and not for the sake of any national gain.

A false sense of honour is everywhere a great obstacle. It is forgotten, first, that the honour of a man or of a community can be injured by that only which he, or it, *does*, and never by that which is suffered; for this latter, if it is evil, injures only the honour of him who inflicts it. Secondly, it is a fallacy to believe that a surrender of a part of its independence does injury to the "honour" of a State. In former days there were towns who often made war upon each other. Was their honour injured by the fact that they united into States?

The single State formed by the League of Nations is far from being the highest. Nothing earthly can here be the true goal. But the single State formed by the League of Nations is the ultimate and highest earthly means on the road to that goal.

We do not know the ultimate goal of life, of mankind, and of history. It is certain that it is not of this earth, as a socially perfect State would be. We shall probably not

be wrong if we look upon every living being which is earthly and material (and therefore upon man too) as a mere transition to forms of existence which we cannot know.

III. FREE WILL

We now know the position of man in the world: we know the significance of his volition, his action, and his duty. The contents of my duty are wholly personal, and every man must settle them to the best of his conscience.

But there is one matter, and that the most important of all, which has not yet been investigated, and that is, the answer to the question, "*Can* I"?

It may be asked if this question is really important, since *of course* I "Can" what I will, and even, in a certain measure, what I ought. Why then the new investigation?

We reply that this new investigation will prove the most significant and at the same time the hardest part of the whole.

For we are here faced by the great question of Free Will.

I will, and it is my body, or rather its Vital Force, which executes my will; so much we know. In every-day speech we say that first I will and then I act, and this may suffice as the abbreviated statement of a much more complex state of facts. I will and I act—sometimes as I ought, and sometimes, unfortunately, not.

Now in the case where I do not act as I ought, would another course of action have been possible? This is the assumption of unsophisticated man. He tells himself that he ought to have acted in a different way, and surely

that must have been "possible". To the unsophisticated, "ought" includes "can"; he simply accepts this, and continues to bear the burden of a bad conscience, reflecting that this burden is a punishment which he has thoroughly deserved. He tells himself that *of course* he could have acted differently if only he had offered a stouter resistance to his egoistical or his sensuous impulses, and if he had listened solely to the inner voice of moral consciousness. "He could very well have done this"—have listened to the inner voice and have resisted the impulses.

But now Science and Logic come and tell him that everything in the world is absolutely determined, and that this includes his every movement of will and his every action, so that he could *not* have acted in a different way.

Many men are disquieted by this insinuation. It is true that they cannot abolish the inner voice and that they cannot declare it to be "appearance". It is far too insistent and too immediate. But they can say: "The world is made in such a way that in spite of universal determinism the ethical voice exists. Perhaps it indicates to me the part which I am designed to play in the world-plan. If it is a part which aims directly at the fulfilment of the world-goal, then it is accompanied by a good conscience, but not otherwise. I cannot understand all this, and if this is the truth, the ethical voice seems to me to be pretty superfluous and even cruel; but there is no help for this".

Others, and among them great philosophers like Kant and Spinoza, take up another attitude with regard to determinism. They say that "free" does not mean that there is a choice between two courses. To act in a free manner simply is to follow one's own nature, which is

virtue based upon understanding. The meaning of "be free" is, "follow solely your innermost nature and not your impulses". As though, if *nature* is a fixed and given magnitude, one could will and act differently than one does. An attempt is made here to save a little part of genuine freedom, that is of the opposite of determinism; but at bottom it cannot be done. There is no sense in laying down a line of conduct if there is only *must* and no free and genuine *can*; and there is no such *can* if the innermost nature, or the "intelligible character", as Kant calls it, is the "persisting basis" of every volition and action. We have recourse at length to an excuse and a fiction: consider yourself and others "as though" you were free in the genuine sense—but in fact you are not.

Nothing at all has been gained by this for the essential question.

We want to know whether we are free in the *genuine* sense, that is, whether our volition and our action are not determined by anything, even by our own nature, which is a *datum*, fixed and enduring.

In these prefatory remarks we have consistently treated volition and action as going together. Were we justified in doing this? It may be that a further analysis of the question is necessary, and that our method prevented this, and thus at the same time prevented the necessary clearing-up of the whole problem. Let us then investigate volition and action separately, and in the hope that it may be possible to discover a real freedom—a method which we successfully applied at a former stage, although from a wholly different point of view (p. 105).

Evidently it is not my fault if a volition, that is, a

will-content of a particular kind, enters into the sphere of my consciousness. Nor is this what I will. In other words, I do not will to will.

Thus each single will-content comes before me automatically, that is, at the call of the inner play of my psychical forces. I experience it whether I will or not, and whether I approve of it or not. Here then there is, immediately, no question of freedom, although it may soon appear that in an indirect manner there is. At this point freedom is no problem at all.

The case is quite different where the will-content which is merely experienced is transformed into action. This is the sole point where there could be any freedom, and this point we must investigate in the hope that we may discover it. And this probably is the sole point where the unsophisticated man feels free, and tells himself that he *ought* to have resisted the temptation. Here the temptation consisted in the illusion which was presented to him by his volitional experience.

We are, then, investigating the transformation of the will into action; in other words, the assent to or dissent from the will-content. Or perhaps rather we are investigating dissent and the omission to dissent, so that, unless I said *no*, the volition would automatically transform itself into action. At this point, however, we will not further pursue this difficult question.

It may perhaps be objected that a will-experience which has not yet passed the barrier between yes and no (to use a figure) is not a genuine experience of will, and that if there is freedom of choice between yes and no, it lies between desire and will; and that if the will really is will, it automatically brings the action with it.

To me, however, it seems that a genuine wish (for example, "I should like to be able to fly") differs in some important respects from that which we here called will. The minimum which our will requires is, that that which is willed shall be capable of realization. But I do not mind if a distinction is made between preliminary and final will, and if it is asserted that we must investigate whether any freedom can lie between these two, freedom being that which effects the transformation of the former into the latter.

Probably this distinction is of no importance for the core of the question. In the one case we are dealing with a freedom which merely admits, and in the other with one which merely prevents; *either* the transformation of volition into action, *or* the transformation of preliminary into final will, is admitted or prevented as the case may be, if there is such a thing as freedom.

Up to this point we have been engaged upon clearing up our concepts.

Now, however, we come to facts, that is, we have to decide whether in fact there is any freedom within the sphere of acts of will. We know once for all that it can be no more than a freedom to admit or to prevent, as the case may be.

We must first say a word about the objects of freedom, if there is such a thing as freedom. They are the same as the objects of volition, and these we have fully discussed on pp. 110 *sqq*. The most important of these, especially in the ethical sense, are, first, actions proper which are manifested in movements of the body, and, secondly, acts which educate the soul by means of suggestion, which, as we know (p. 122 *sq*.), must first of all

be willed. Strictly, my own soul only stands in question here, for the education of another's soul must be effected through "actions", like speech, unless the case is abnormal, as where telepathy takes place.

Now clearly it is possible to educate my own soul by means of auto-suggestion with a certain amount of success in such a way that it ceases altogether to bring before *my consciousness* any temptations, that is, any will-contents which *ought not to be*. We had this possibility in mind when we said above (p. 140) that the play of my psychical forces, which produces my will-contents, might be subject to influences and yet be free.

We now proceed to discuss the actual question of fact: "Is there any free will"?

It is frequently asserted that the problem of organic life has been decided in favour of vitalism and against the mechanistic machine-theory, and that this implies the affirmation of free will. This, however, is an error, and the question of free will lies beyond the problem of vitalism. It is true that there can be no freedom outside the sphere of vitalism, but it still remains to be shown in detail that it does in fact exist within this sphere, for it is possible that the non-mechanical vital factor which is introduced by vitalism is determined quite as rigorously as any machine.

Let us then proceed.

We cannot find within ourselves any criterion which can answer this question, for even the existence of an ethical consciousness might be explained on the basis of so-called determinism (p. 138). We are reduced therefore to collect from every source the facts which seem to support or oppose the theory of freedom.

It is certain that this method will show us quite a number of facts which favour determinism, and consequently refute freedom.

In this connection the phenomenon known as post-hypnotic suggestion has often been cited. I order a person who is in a state of hypnosis to execute a certain action at a certain hour after awakening, and at the same time I order him to forget the order itself. He awakens, and has in fact forgotten the order as he has forgotten everything else that he experienced in the state of hypnosis, and proceeds to execute the action at the appointed hour, unless it is too absolutely opposed to his "character", like the suggestion of a murder. He "wills" the action and feels "perfectly free"; and if the action happens to be particularly odd, he may even say that he acted from caprice: "after all, I can do as I like". We know that the exact contrary is the truth.

What is known as knowledge of mankind can also be used as an argument against freedom. Many a man can play upon his fellows as though they were instruments, because he knows the "laws" of their behaviour. And to a certain degree every man has such a knowledge of mankind.

Statistics, too, and especially criminal statistics, may here be quoted. They tell us that in every year and in every people so-and-so many murderers and so-and-so many adulterers are found for every thousand inhabitants, and it seems as though inexorable and fixed laws (in this case laws of inheritance and of character) are dominant here.

Further, one school of ancient Greek philosophers, the Stoics, tell us that the true "nature" of man is good.

If this is correct, surely it is the case that man *must* will to become better, if he knows the means of bringing this about. *Must* he not then will the education of his own soul by means of suggestion, if he knows how to make it better? It thus appears that even that first act of volition is determined which stood at the beginning of everything that partakes of the nature of suggestion, and which we called that first "resolve" (p. 116), the further course of which is automatic; for if my soul is good by its proper "nature", it cannot admit anything but an affirmative reaction to a method of education which proceeds by means of suggestion—that is, if the Stoics are right.

And finally, there are prophecy and premonition. In this region it is true that our knowledge is far from final; but the number of individual cases is growing steadily—cases which are vouched for by men of trust and credit, scientists and clergymen; some of them have been vouched for to me personally. These are cases which deal not with vague and indeterminate matters, but with ultimate details.

I admit that if prophecy were only a little more common than it is to-day, I would be obliged to take up my stand definitely against freedom. Even to-day it is a fact of great weight, unless indeed we are inclined to make a distinction between free and determined actions, since it is evident that determined actions alone could be the objects of prophecy. But one single free action in the strict sense suffices to alter the whole course of the world, so that even the most distant events may through it become other than they "might" have been.

Prophecy would be compatible with freedom only if

the latter were very rare, and in that case prophecy would never be of a definitive character. Every prophecy would then be preceded by the reservation, "provided that free acts have not intervened".

The scales thus seem to be heavily weighted against freedom; but the last word has not been spoken yet.

There is one phenomenon in the world which is closest to us of all the phenomena with which we are acquainted, and which would become superfluous in the world unless it were the vessel which carries freedom.

The phenomenon of which I am speaking is *consciousness*, or conscious experience.

Let us then begin by speaking of consciousness in general, which up to this point we have carefully avoided to do, and let us then only return to the problem of freedom.

Consciousness is not at all like a substance or a thing, not even if we refrain altogether from regarding it as being spatial in any way. At this point *consciousness* is simply a word, and in a grammatical sense it is a noun or a substantive. Since we are not really dealing with a substantive, this word is not appropriate. But we also speak of "heat" or "virtue", although we know that these too are not things. "Consciousness" has proved to be very dangerous, since it has often been allowed to connote a thing, and even at this time of day people speak of a so-called "content of consciousness" as though "consciousness" were a big pot, "in" which things are contained. In place of the so-called content of consciousness *we* say "objects experienced by the ego", or *ob*-jects which stand over against the ego in the form of conscious

experience. This too is an image, but it is rather a better one. Also it leads us to the real facts.

There is such a thing as the fact "I experience something", and this alone it is which may be expressed by the short word *consciousness*; just as "heat" may express simply the fact that there are hot things and the word "virtue" the fact that there are virtuous men.

Now it might be said that the "ego" *is* consciousness. But I too am not a thing, but the self-knowing subjective point of all knowledge. Hence "consciousness" may denote only the fact that there are egoes which experience consciously, and in this sense alone we will employ this term.

Now we already know (p. 34) that I have immediate acquaintance with *my* consciousness alone, that is, with the fact that I have conscious experiences; and I know the real meaning of this. I cannot define it, but I know it.

Further, we know that there are *souls*, and more particularly that there is "my" soul, which is the unconscious foundation of my experience, where "unconscious" means simply that it does not know in the form of my conscious knowledge.

My soul becomes conscious of itself in the form of conscious knowledge of the ego; this perhaps is the most fitting expression for the fact which lies before us.

The question now arises, down to what stage in the animal kingdom is there consciousness proper, that is, down to what point are there souls which know themselves in the form of knowledge with which I am acquainted? We cannot tell exactly, but we suspect that consciousness exists down to the lowest animal beings.

It appears as though the conscious sphere of the soul

grows wider and wider in the course of organic racial history, and, what is more important, that it grows more and more clear and conscious, if the so-called comparative of grammar may here be employed. Even infusoria and worms have "memory". Sea-stars and lobsters "experiment" and "learn", and it seems as though the anthropoid apes could "think", that is, could make use of previous experience in order to draw conclusions. Man alone probably thinks "abstractly", that is, reflects upon thought itself, and thus has the power to investigate the strange rigid forms, in the manipulation of which thought consists as such; so that he can consciously pursue (for example) mathematics, the theory of syllogisms, and the theory of categories. Man alone is *self-conscious*.

Thus the great and supra-personal force which is the basis of organic history and, so to speak, gives birth to it (the manner of this birth we do not know at all), appears to have one definite aim before it, namely, to bring forth consciousness in ever-growing clarity. This concept is not new; we find it in Schelling, and we find it expressed with particular definiteness with Schopenhauer, and in the most modern times we find it once more with Geley and Scheler. In each manifestation the form is slightly modified. We shall soon proceed to pursue this concept further; for the moment we suspend the discussion.

For at this point we are interrupted by a curious phenomenon. I said (and not I alone) that the conscious ego only "experiences", or, to put it in a perfectly neutral form, that it only "has" and never "does". Whatever is "done" is done by the soul in the realm of

the unconscious, that is, of that of which I am unconscious; and this is true even of so-called "reflection" (pp. 117 *sq.*).

Why then does the phenomenon of consciousness exist at all, if it is superfluous for whatever *happens* in the world?

Has the great and supra-personal principle in the world no other aim than a partial self-mirroring in many egoes of various form?

It is certain that this self-mirroring is not accompanied by a great deal of bliss, and if it is no more than a mirroring, it even has something cruel in it. For here the supra-personal entity is raging against itself, since it presents to itself all the sufferings of the beings to which it gave birth—if it is no more than mere self-mirroring.

The question, however, is, have we here no more than a mere self-mirroring? Is the true play of forces in the world really unconscious at bottom, and is consciousness no more than an added luxury, one, moreover, in which there is a great deal of cruelty? For he is undergoing cruelty whose fate it is to witness suffering and to be unable to extricate its victims. And according to our doctrine the egoes, all of which are subjects consciously experiencing suffering, cannot "do" anything, since they can merely "have".

But might it not be the case that our fundamental doctrine requires an addition at one point? If that were so, we might perhaps escape from the insupportable doctrine of the dynamic superfluity of consciousness in the world, and from the doctrine that the world is nothing but a stage, on which puppets equipped with consciousness play their parts—puppets which are certainly

automatic, although perhaps automatic in a "vitalistic" sense.

Let us at any rate attempt the escape. We have some hopes of success. For the doctrine of vitalism has one general principle, which is that the organism has no arrangements which are not of some importance for its place and safety in the world; and it is certain that consciousness is such an "arrangement",[1] although it is not a material arrangement.

Now if the conscious part of the soul, the ego, exerts what we may briefly call any force at all, then it is easy to see that this can relate *only* to a free assent or dissent on the part of the ego to contents of will which are experienced by and "presented" to the ego. We thus come back to the question of freedom.

We know with certainty that if so-called thought is taken as a process, then this process has an automatic course, and is effected by the unconscious soul, which has its own non-spatial structure and dynamics, in a predeterminate form. Certain philosophers indeed have lately made the attempt to represent the acceptance or rejection of what is called the content of a judgment (like such propositions as "the world revolves on its axis," and $2 \times 2 = 4$), as being a *free* assent or dissent, and to make logic so to say a part of ethics. But this is certainly false, and since Spinoza it has been clearly understood that the understanding of a proposition and its acceptance (or rejection) are one and the same act. I can, of course, will to tell a lie, but that is a different

[1] I use the term "arrangements" expressly, for the organism certainly possesses some individual *properties* which are wholly indifferent to it—for example, the yellowish tint of the biliary juice.

matter, since it is an action. But once I have understood the proposition, "the sum of the angles of a triangle is two right angles", then I must assent to it, and cannot help myself; assent is no new term added to understanding. And "no" belongs with a similar compulsion to the "understanding" of the proposition "$2 \times 2 = 7$". Here there is no question either of ethics or indeed of action; these are not the objects of the discussion.

The case is similar with the most complex structures of thought. If they are understood, they are also accepted or declined (as the case may be) *ipso facto*; and the same applies to propositions which I consider "probable", like the proposition that Mars is inhabited. The Unconscious may here play me a trick; unconscious wishes or impulses may cause a proposition to appear more probable to me than it is as a matter of "objective" fact. But this trick is played upon me in the unconscious, and it is the latter which presents to *me* this proposition accompanied by a note of probability or even of certainty which it does not deserve. All religious tenets belong to this class. Very frequently, after the unconscious has done some more work of a purely logical kind, I see through the original trick, at any rate if I am of a "critical" disposition; and I end by assigning to the proposition the degree of probability or improbability which is its due.

But with genuine volition and action, whether it is directed inwards or outwards, the case *might* be different, and only if it were different, that is, if my assent or dissent were *free*, would consciousness have a meaning as a force within the play of the world.

For it might be the case that the contents of my

volition, like any other thought or any other image of fancy, are placed before me[1] in the shape of an image[2] by the predetermined play of forces of my soul, and that further *I* am *free* to say "no" to their realization. If I do not say "no", then the realization of every content of will takes place automatically.

Now it may be the case that there are only few men who have this power of negation, and that even they have it only on rare occasions. Hence the forecasts made by criminal statistics and by prophecy are at least approximately correct.

All this, then, *might* be the case. *Is* it in fact the case? I do not know; and if I am asked to give a decision on the question of free will based on genuine knowledge, then I freely confess that I cannot give a genuine decision with any confidence.

If freedom is rejected, consciousness becomes superfluous as a world-force; this certainly is a powerful argument in favour of freedom, to which we might here add the powerful emotional strain which attaches to everything that has to be evaluated ethically, especially if I myself am the agent. Where this strain follows upon actions which "ought not to have been", it takes the form of the "pangs of conscience", and is so powerful that, if there is no such thing as freedom, it becomes a cruel superfluity. But I admit that all these are sentimental rather than scientific reasons. They are opposed by all that we have expressly enumerated against freedom, like post-hypnotic suggestion, knowledge of mankind, and premonition.

Those now who feel able definitively to decide in favour

[1] *Vorgestellt.* [2] *Vorstellung.*

of freedom should finally consider the question, *Who* really is free? The common answer is: *I* as a part of my soul. And not only I, but also you and he. But *who* are these, "I, you, and he"? What is their essence and how can we apprehend them? The fact is, that *if* they really are free, we can *not* apprehend them in so far as they are *free*. For they are debarred from having an *essential nature* or a fixed character, as the "persistent condition" of their action. If they had such they would not be free; even their assent and their dissent would be determined by their *essential nature*.

Who, then, finally is responsible, because in the genuine sense he is free? I do not know.

This is the greatest paradox within the doctrine of the freedom of will. The free man would not be a man to whom it would be possible to point. Really he would be a different man with every action which he does, and the action itself would have effected the change. How then can we make him responsible, as being what in fact he has ceased to be?

But if he is not free he is also not responsible.

What then follows from all this?

IV. CONSCIOUSNESS AND THE PART WHICH IT PLAYS IN THE WORLD

Finally, I proceed to consider in a popular and quite general manner the part which consciousness plays in the universe. Here I will assume (although I know that my reasons are not wholly adequate) that this consciousness is free to admit or to prevent the realization of contents of the will.

The great and supra-personal force to which the

organisms owe their existence intended, then, created beings which should be free (beings really is no longer the right term). They exist, and the question is, what do they do with their freedom and their "ethical reason"?

First of all we remember the saying of Goethe: "He calls it reason, and uses it to be more bestial than any beast".

It is true that it is Mephistopheles and not Goethe the author who expresses this opinion; but Mephistopheles knows mankind.

And further, we remember numerous sayings which are to be found in the Bible, in the sacred writings of the Indians, and in those of Schopenhauer. We recall finally the wonderful description of the terrible part which consciousness has hitherto played in the world, given to us lately by Theodore Lessing in his work called *Spirit as the Destroyer of the Earth*. We, that is I and my contemporaries, have experienced more than most generations in all its terror whither "free and conscious Will" can lead, when it has at its disposal "a vast store of knowledge". Chemistry alone has, in the hand of will, become a scourge.

To a very great extent man in these days has the forces of Nature in his hand. It is true that he has used his power to do some good, but also he has brought about terrible evil. Especially, as Lessing describes with profound emotion, he has persecuted and destroyed the innocent world of animals; and he still continues to destroy in the most cruel manner, and all but extirpates whole species.

One is thus forced to ask whether consciousness is not,

after all, the work of some devil. Everywhere we meet with egoism, whether personal or national, and with lust in power for its own sake, without any respect to an ethical consideration of the end and the choice of means. And sometimes, although we may be able to approve the end, the means are horrible. In this way the world may in truth be destroyed by spirit—a pretty spirit!

Yet, in spite of all this, spirit where it has come down to earth has the power of doing good. It certainly has done so in individual men, although generally these were preachers in a small community. But they served for a pattern; and the very fact that such men have existed with their communities is proof that spirit can effect good. Even at this day, and quite apart from Gandhi the Great, there is a not inconsiderable community of men—I mean the Quakers, who have given themselves the name of "Society of Friends"—who really do strive to realize the good which can flow from the spirit wherever they can. They know neither arms nor enemies, and allow us to have a glimpse of the fact that the whole of mankind can become a "Society of Friends".

And that would appear to be the great end at which to aim.

For the idea that I might be saved by means of the "light" which has been kindled within me, to use Schopenhauer's expression, is, in its deepest sense, a selfish idea, unless it is thought to imply that the salvation of one man may magically effect the salvation of all; and hardly anyone believes that now. After all, all the great teachers of ethics, who had found salvation for themselves, taught others what they had learned themselves, although they well knew what dangers the fact of

teaching would bring them. The stories of the temptation of Buddha and Jesus have for kernal the difficulty of reaching this resolution to teach.

There is one very great realm of knowledge—medicine—which up to this day can make the claim that it has not yet done any harm to mankind; for hitherto Bacteriology, unlike chemical and physical learning, has not been employed, at any rate in war. Medicine has made war on diseases, and has even exterminated them; it has rendered great countries habitable, and it has greatly reduced infant mortality. Of engineering we may say, besides much that is ill, at least this much good, that it has given to man inanimate slaves, in the shape of machines, which deliver him from much heavy but necessary labour, and make him free to pursue higher things.

It might here be objected that the pursuit of medicine unintentionally helps to cause excess of population for the whole world, or at least for some countries. To this we would reply that this need not be. Birth-control too is within its power. Here we have not artificial contraceptives in mind, but the idea that physiological skill might well extend so far as to embrace the control of the reproductive impulse. This would satisfy such communities as reject as immoral the only means for birth-control which we have at our disposal at the moment. (I do not assert that such a rejection is wholly justified.)

We see then that applied science in the most various manner and forms can effect a good deal even to-day; and if it is devoted exclusively to the service of rational will in a belief in freedom, then it will realize nothing but good in so far as it can effect anything. We even go so

far as to hope that it may extend the field of practical ethics to our fellow creatures, and that a time may come when it may find a substitute for the cruel practice of killing animals for food. If it is urged that in that case animals would multiply into infinity, then it is also possible to imagine ethical means for preventing this, namely, the same as are intended to control human births.

It is impossible to imagine as yet the services which would be rendered to a true science of mankind by a psychology based upon really profound knowledge. At the moment there is no science in so elementary a state as psychology; nevertheless we are able dimly to apprehend the possibilities. It is to be desired that our educationalists should become students of the profounder psychology and cease to despise an acquaintance with laws of psychology, as they too often do. Here too, of course, it is possible to turn knowledge to harmful ends, if it falls into the hands of men who are possessed by a will to power and to evil. For this reason an education of all, superintended by all men of good will, is the most important of all needs, an education which is based on a profound knowledge of the soul and apprehension of ethics, following the dictates of reason, and therefore "rational".

There can be no such thing as an excess of true rationalism, that is, of a rationalism which embraces the whole of actuality. Everything, and especially all the impulses and all feelings, must come under the domination of reason; that is, they must be studied in their nature and with respect to the laws which govern them, so that they can then be deliberately controlled. "Feeling"

must not rule without the sanction of reason. I am well aware that this is an unpopular doctrine, especially in Germany, where people have long been indulging and still indulge in vague "feelings". We may ask, what has been the result for Germany? I am far from defending a merely utilitarian standpoint, but I wish to show that the harmonious structure of the world is such that, whoever is ethically false is also, in the profoundest sense, a fool.

I therefore reject the phrases which tell us that our intellect has caused us to lose our "close touch with life", our "certain instinct", that the spirit kills life, and the rest. Such phrases are the outcome of intellectual weariness and loss of self-confidence. It is true that the spirit can be the disease which kills life, but it need not be so. Spirit is itself the finest flower of life, and was created by life in order that it might bring about that which an obscure and impulsive urge could produce only incompletely and at the cost of permanent self-conflict: I mean the harmony of the world. Let us then have confidence in the spirit and in "rationalism" too.

I have been speaking of rationalism and praising it as the foundation of morality and as ultimately even identical with it; I have gone on to call it the saviour of the world. In doing this I have, of course, in mind genuine and complete rationalism, and not the kind which has no larger a scope than the mechanistic view. We know that the doctrine which teaches that the world is no more than a huge mechanistic system is definitely false. Nor is rationalism intended to mean that we understand the world as it is. Reality can be experienced, but we do not understand its nature in the field of mechanics or in any other field; for nowhere are we convinced that

the set of laws which apply in that field must be valid to the exclusion of all others. But we can apprehend the world in its completeness as it is, although we cannot apprehend why it is so, and this is what we call rationalism. In this sense then we apprehend that there are non-mechanical forces of the soul, that there are moral axioms, that the universe has a non-earthly spiritual end, and that there takes place within us an interplay of subconscious forces which are subject to law and can be directed towards the good. For education the latter is the most important fact of all.

This true rationalism can make of consciousness a beneficent force, and it is my opinion that consciousness exists for the sake of this rationalism, however often it may go astray. For the unconscious vital element has gone astray far more frequently, as well in the sphere of the totality of life as in the soul-life of the individual. During the course of racial history it has created those monsters which we call beasts of prey in the widest sense of the term—those monstrous phenomena where animal turns against animal, to which class we still belong. In the sphere of human soul-life it makes the individual the slave of his impulses and "feelings". By it the individual is rent, and with him spiritual mankind. *Homo homini lupus*—that is, man is as a wolf to his neighbour.

We reject then as uncritical any admiration of the "it" and of the subconscious and unconscious, those popular modernities. We reject any surrender to the "it", which in truth is no more than surrender before our own weakness. We admit that we must study the subconscious and the unconscious, and we may praise their

creative aspects. But they are demons, and at once both divine and diabolical. It is our function to lay the devil within them in so far as in us lies; or, to put it in a more sober manner, to control the subconscious and the unconscious in the service of reason, and taking our knowledge for foundation.

It is consciousness or *ratio* which makes man the master of himself and of the whole of Nature, and, since moral intuition is a part of *ratio*, it can make him the moral master of himself and of all the rest. It can make him master of himself in that the rational ego acknowledges the laws of the whole of the subconscious and proceeds to control them; and of Nature (and especially of organic Nature) in that he apprehends laws in this sphere too, and turns their manifestations to the greatest good of all creatures. It may sound phantastic to intend the abolition of beasts of prey (without cruelty to them, of course); but science knows no star but hope.

Spinoza defined the Good as that which is useful. By the Good he understood that which promotes the true nature of man, that is, reason and morality.

My acts must be those of which I believe that they best promote the destiny of man. I must try to understand "destiny" to the best of my conscience, taking into consideration every aspect of actuality. This true categorical imperative should also be the guiding rule of politics, which thus alone becomes a true "*Realpolitik*". For the spiritual side of man too is real, and not only economic facts. Considerations of this kind alone led to the abolition of slavery and of torture, which were the blots on an older age (including the much-praised classical age), and similar considerations alone based upon

grave, conscientious, and complete pondering of realities, will lead for good to the abolition of war, that third blot which still disfigures the face of mankind.

This demand that a profound and rational consideration shall regulate the whole of our actions might appear to imply a surrender of our "freedom" which was taken for granted in this section. Surely I *must* say yes (or no) when, after a consideration of this kind, I have reached the point of willing. The result of such a consideration determines my yes or no.

Certainly it does, and ought to do so. But *if* there is any freedom (I do not assert that it has been demonstrated), then the category of free acts still comprehends the resolve to let consideration be guided by reason, and to allow true rationalism to guide volition. The case is exactly like that with which we became acquainted when we were considering the auto-suggestive method of Coué (p. 116). There too there was a "first resolve", namely, the resolve to surrender to the method of suggestion, whose subsequent course was automatic. Here we have the "first resolve" to surrender to strict and rational self-examination and to follow none but its results.

This first resolve might be free. Let us believe that it is, and let us act in accordance with this belief.

V. THE QUESTION OF IMMORTALITY

We have assumed that moral intuition in general is an immediate fact of conscious experience. Knowledge about that which is good in particular (that which *ought* to happen) has, on the other hand, been allowed to follow from metaphysical considerations. Here complete

consideration meant the same as "rational" consideration; and even the most general intuition of the meaning of *good* depended upon rational considerations, for without these it would be, so to speak, in the air. We may assert that the intuition of the term "good" must become a member in the total system of knowledge, and must, so to speak, be supported by this totality.

But all this does not alter the fact that my intuition of the good binds me immediately—a fact which was called by Kant the "primacy" of moral consciousness. To put it in ordinary language, I cannot escape from my conscience.

Now the existence of moral consciousness has its rational foundation in the ultimate metaphysical essence of the world, and it seems to me that this fact is not without practical significance. I even think that one definite metaphysical doctrine, namely, that of *immortality*, is of fundamental importance for that which I call the penetrative force, which moral consciousness has for the person in whom it is at work.

The fact remains, then, that conscience in its original form is a datum from which I cannot escape. But it might be suggested that we are suffering from an illusion when we hold it to be thus ultimate and unescapable. Perhaps "life" merely planted it within me because "life" cannot exist without it. In that case it would be of use to life only in the lowest (for example, the Darwinian) sense, and would have nothing to do with the plan of the universe.

If this is really so, then it would appear that the truly "ethical" nature of moral consciousness can no longer be upheld. I live, but I shall die. And if death is extinction,

first for me as a person, and ultimately, when the earth has grown cold or has been destroyed, for the whole of mankind, then, after all, in the profoundest sense it becomes indifferent whether my actions are ethically sound or not. For in that case life in its profoundest foundation is indifferent; it is a game of a rather doubtful character. Then let me at least so order my life as to reduce its unpleasantness for me to a minimum. Morality is an illusion, and I reject it, for I have seen through the fraud which was employed in order to implant it in me. All that remains is a "practical science of life", and I act morally only because otherwise it might go rather ill with me.

It seems to me that in our day there are many who have been led to adopt this point of view by materialistic doctrines, although they do not like to say so, since that would be too dangerous. But there is no other explanation for the strong earthward tendency of our times, and for the striving after power, whether of a personal or a national character. The consciousness of power intoxicates and pleases. Let us therefore surrender to it, but carefully and without discarding that slight cloak of morality which in truth has nothing to do with morals.

I venture to assert that moral consciousness can have penetrative force only for those who accept immortality in some form. For the philosopher this will of course be no childish form.

He must think of no "reward"; such a consideration would be the negation of ethics. But he may consider justice, and he may strive to cause joy to some highest principle which he loves in its sublimity. But he can do all this only on the assumption that he will persist and

that he has a refuge in this supreme principle, which does not stand over against him as an alien force of which he is the plaything and the gull.

I could not have any concern with the highest principle of the whole of existence if I were no more than a sporadic phenomenon among existent entities, and not I alone, but all. Thus looked at, everything becomes indifferent; let us then enjoy life, tempering enjoyment with a little cautious morality which inwardly we smile at.

Many men to-day are quite candid in this respect, and are at any rate consistent and less distasteful than those who pretend a belief in some religious principle in which in fact they do not believe.

Now ethics can derive its penetrative force from none but certain definite metaphysical convictions. Hence comes the enormous significance which in our day attaches to every attempt at a scientific demonstration of immortality, that is, one that has a foundation in knowledge. We are told that we may "believe", since at any rate we know at least something. And this gives us a new attitude towards the universe. We are more than citizens of this world, and more than merely earthly. Life on this earth is a state of transition and a phase. It is a phase the necessity of which in the world-plan we do not understand, but upon which we may look as a state of probation.

For those who deny immortality the moral principle has become fundamentally indifferent; and it must be admitted that from this new point of view too a good deal becomes indifferent, namely, everything that is earthly in the proper sense of the term. But the essential matter does not remain indifferent, namely, the quality of

actions from the ethical point of view. Nor does all that is earthly lose significance: for example, everything "social" and everything that appertains to the State retains its significance. But it retains it only in so far as it serves to set free the individual for the highest—that is, as a means and never as an end. Where it becomes an end in itself it may actually become a hindrance, as we all have experienced, and as we may still witness in countries where a dictatorship is in force.

Now *every* metaphysical conviction based upon knowledge will not suffice; in order to give penetrative force to ethics it must be expressly directed upon immortality, and must assign to mortality a place in the world-plan where it shall be an essential and dynamic member. Many doctrines which are classified under the so-called German Idealism have done quite as much harm as materialism (this does not apply to the doctrines of Schelling), and Hegel's deification of the State has perhaps done more harm than any, for it gave a metaphysical cloak to what is utterly earthly. The only ideals which this idealism acknowledged were extremely human, and at bottom it was a worship of success, a system in which it is indifferent whether the ultimate foundation of brutal empirical actuality is looked for in the forces of matter or in the "idea" which unfolds. An "idea" which plays with the individual can give no more penetrative force to morality than can a materialism which plays with him. What is important is that the individual shall know that he is a permanent member of Reality working towards a moral end, and he may justly feel indifferent to the ends of an idea which treats him as a material to be used up.

D. CONCLUSION: MAN AND THE UNIVERSE

We now ask the question, What is the real meaning of *Man and the Universe?* Is this title a correct description of the contents of this book, which is now drawing towards its conclusion?

In my opinion this title was a correct description of the contents of this book only at the very beginning, when we were taking up the "natural" or unsophisticated standpoint, where it is in fact correct to oppose to one another the ego on the one and the universe on the other hand. But at the conclusion of the book the title which we gave it at that place is no longer wholly accurate. For the word "and" should be used to connect only co-ordinate concepts, while everything that we encountered on our way showed us that man and the universe are not co-ordinated.

Man belongs to the universe; we may call him a part or a member of it, or use any other term; and this statement is correct whether used of man as acting or as apprehending. In human apprehension the universe apprehends itself, and in human action the universe acts without transgressing its own limits. For it cannot be that the universe *plus* something else exists—at any rate if we equate universe with reality, and this must satisfy even the theists.

Man is the richest member of the universe which we know. We know him from within and from without. It is possible that there may be richer members of the universe; we do not know, but we are led to suspect as much by the knowledge which we have about certain men who possess what are called paranormal faculties.

We may call them supermen, or conversely we may call the "normal" man infra-man.

But even normal man is a very rich member of the universe. For it is precisely in man that Reality has forged for itself an instrument for self-cognition and self-formation within the sphere of volition based upon knowledge.

There are many men, and all are ultimately of the same nature. There are also fragments of Reality which, although they are not of the same, yet are of a cognate nature with man. This is true of animals and perhaps of all organisms. This much we know; but we repeat once more that we do not know whether there are richer parts of Reality having a totally different nature. If there are such, it is probable that they are beings having intelligence and will, and to this extent they would be of a kindred nature to man in the most general sense.

The non-living is not of the same nature with man; that is, that which, in the form in which we experience it, we call matter.

There is no escaping from this dualism, which, as we know, is ultimately the dualism which subsists between totality and non-totality; not even if we say that matter "in itself" is perhaps something quite different from a spatial and movable something.

Man as totality and as knowing entity is held within the bonds of matter while he is alive. We do not know what is his case when he has ceased to live, or what it was when he did not yet live. To "live" means to be a totality and a knowing entity, and as such to be held in the bonds of matter.

The body is the material prison of man, and as such

it is at once his good and his evil fortune. It is his evil fortune, since his prison is a barrier to the possible range of his knowledge and also to his actions, and further to the manifestations of his moral disposition. For his senses are pretty inadequate instruments, and with respect to at least a part of his knowledge he is bound rather tightly to them. And the body (that is, matter) is also the source of many ills for man. Further, as a living man, he is perpetually exposed to the dangers which come from an alien matter and have the power to destroy his body.

But body and matter in general are also the good fortune of man; or, at any rate, they are the good fortune of man as we find him, of empirical man. For man was created to be a willing and striving being, and he can act, as we know, only through the instrumentality of matter. He is tied to his material body, through which his volition acts, and he is capable of immediate action only upon matter, although souls may be the distant aim of his volition. At any rate, this is true of normal man, the average man of to-day. Probably it is never the case that human volition is turned ultimately upon something which is purely material as such. This is very clearly the case with education, which operates immediately by means of matter—by means of speech, writing, and so forth. But it is certain also that in a work of art the aim is not to produce an arrangement of material particles, nor the intention which lies behind a work of applied science or of mechanics to produce no more than such an arrangement; the end is always to exert some influence upon souls.

There would be no place for volition in a monistic universe, that is, in one which was in a perfect state of

harmony. "We", that is natural men *as* natural men, would probably be unhappy if we were suddenly to be transplanted into such a universe. This idea has been used in the attempt to ridicule certain views of immortality. But surely it might be the case that if we enter into such a universe at all, the entry is accompanied by a change in our nature.

A monistic universe would be a universe of pure totality, pure knowledge, and pure holiness. It cannot be imagined otherwise than as a clean severance between that which is of the nature of a totality and that which is not—which two terms are closely connected in empirical dualism. Thus after the severance the dualism as such continues to exist, but it no longer mars the totality. Matter has been cast off and has been left to itself; it has ceased to sound a discord. Thus here no life in the empirical sense of the word exists, for life in that sense means that a knowing totality is held fast in the bonds of matter.

In life, that is as long as we live, we are unable to effect that clean severance which would set us free. To do so would mean to kill ourselves.

Moral intuition seems to teach us that we *ought* not to kill ourselves, but ought to wait until death comes. Further, it seems to teach us that we ought not to kill ourselves, and ought to endure in a world of dualism until the coming of the end, because it is part of the world-plan that man is to fulfil tasks which are set him in the realm of empirical dualism.

We do not understand why this must be; it is a kind of instinct that tells us that it must be.

As living beings we are to do moral work with the

world for our field and material. So long as we live the dualistic chain cannot be broken, and it is our task to work within its sphere, our end being to diminish the non-total part of the whole, which consists of two heterogeneous members, the total and the non-total. Our task is to make total more and more that is non-total, to press more and more totality into material non-totality, in the service of ethics.

Why must we do this, when we know that the end can never be reached, and know that even in the best and most fortunate social circumstances the dualistic bond cannot be broken and that the chain can be overcome only by death? Why do we labour for an end which is hopeless for the individual as well as for the community?

Why is there life, striving life, where "life" means the dualistic bond and the living entity suffers from this bond, hopes for a release, and knows what release would mean?

All this we do not know, and any assumptions which we might make would be of no scientific value. This is the place where the religious doctrines of the Fall, Karma, Reincarnation, Salvation, and many others have their origin. All that we know is that a true deliverance is impossible in life; for all evil attaches to the body, and the body cannot be escaped so long as life proper remains.

To this extent life on earth with all its manifestations is discord within the harmony of the whole, of knowledge and of volition. Evil, error, disease, and incompleteness are rooted in it. It is as though in the midst of this confusion we had to fulfil a task completely mys-

terious in its ultimate foundation; as though it were our task to improve whatsoever can be improved in the realm of the dualistic bond, from which there is no escape as long as we have life.

It is certain that the world is a vale of tears. But we are its inhabitants, whose task it is as it is our privilege to alleviate the ill even if we cannot dry the tears. That doctrine is nefarious which denies to man even the capacity of alleviation. It is true that man is bad, but he is not so bad nor so weak that he cannot alleviate if he has the will. And human nature is such that every man has this will, though its manifestations may be hindered or even turned in a wrong direction by error or by a lack of rational understanding. True rational instruction can set it free.

We can never fashion a realm of pure spirit on earth. But we have the power to strive after it and to realize it if only fragmentarily. The first demand here is that selfishness, whether personal or national, be cast off.

Let us believe in freedom and in our power to alleviate.

"God's fellow-fighters on earth" is an old and noble aim; let us hold the faith that we are the fellow-fighters of the spirit; let us believe in the worth of our great task and in our victory on the field of earth.

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