IV.—KNOWLEDGE.

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IT would not be easy to find a better statement of the general nature of knowledge, than that which is suggested in Aristotle's definition of truth. Truth is the agreement of thought with reality. This is not, indeed, a definition of knowledge; but truth is the ideal of knowledge; and therefore we may legitimately paraphrase the Aristotelian dictum thus: Knowledge consists in thoughts which agree with reality; it is the reproduction in the mind of the object. There is wonderful unanimity among philosophers in regard to their use of the term knowledge, though its meaning has been rather an unnoticed presupposition of their thinking, than something explicitly determined. This conception is the foundation of the Idealistic structure. Those who deny that ideas agree with things generally declare plainly that knowledge is impossible.

It is the purpose of this inquiry to determine what elements must enter into a cognition that it may be a reproduction of the object. The following questions fall to be considered: Do the data of the senses, tried by the standard we have set up, constitute knowledge? Or, is it the so-called categories that furnish knowledge? Or, if both of these are found wanting, has consciousness other resources?

It may seem that all these questions have been more or less completely disposed of by such theories as Agnosticism and Idealism. Thus, Agnosticism denies the possibility of a knowledge of the real universe. The whole matter seems to be settled: without doubt that which is regarded as knowledge is not such in any strict sense. Yet the Agnostic will admit that there is a mode of existence, which is entitled to be regarded as real, and which we may know in a quite absolute sense. That is given in our states of consciousness: there are states of consciousness, which are cognitions of other states. In what forms such a cognition is worthy of the name, is as much an inquiry for an Agnostic as for others. We might restrict our inquiry,

though to do so would be more uninteresting, to just such self-knowledge. It is probable that the agnostic would allow the extension of the inquiry at least to the knowledge by the individual of the states of others.

Again, the Idealist has wrought out a theory that seems at first sight to meet all the necessities of the case. He teaches that there is no reality independent of spirit, to which mental states should correspond. The act of knowing and the thing known form an indissoluble unity. But it can readily be shown that, in the present inquiry, no particular satisfaction comes from such Idealism. It would in this general form be inadequate, even were the position of solipsism assumed, for it does not determine what is implied in knowledge by an individual of his own past states. But few, if any, Idealists would so restrict the investigation: the absolute, they tell us, is revealed in many individuals. Each of them, it follows, has its own experience; each exists for itself. It cannot be known to another as a state of that other's consciousness; its *esse* is not that other's *percipi*. Accordingly the question raised in this investigation presses upon the Idealist as upon others. What is implied in the mind's cognition of past experience or of the experience of others? The question is not less pressing when attention is turned to orders of consciousness other than human. Do our sensations or our categories disclose to us the life of the animal? It might seem that the material world could still be sublimated into a state of consciousness, but probably it is our profound ignorance of that world which emboldens philosophers in such speculations. It may be that that world will give evidence that it can be so sublimated as little as any other. And thus, regarding it, the same questions would arise.

If then there is need, under any system, to ask the questions proposed at the outset, the answer may be offered to the first, that the data of the senses are not, in the proper sense, cognitions. Proof of the proposition is scarcely necessary. It will scarcely be maintained by any one that sensations resemble things. At the most, it may be claimed that in sensations are given certain elements which are ordinarily regarded as conceptual, or relational. We shall presently deal with these elements, and their relations to reality, and we need not here take further notice of the view that they, or some of them, are from the first inseparable from sensation. Sensations apart from such relations are our own subjective states; the sweetness is not in the apple, apart from our sensibility; it is not a thought that is a reproduction of the object.

There is, indeed, universal agreement that all our knowledge begins with sensations. The data of the senses, external

and internal, are its only foundation; it can lay no other. 'But at the same time, this abstract subjectivity must be transcended, if the object is to be reproduced. The mind must interpret these subjective feelings, and create an object which may give these sensation-signs significance.

This brings us to the question, are the categories the creation of the mind, which is worthy to be entitled cognition? The distinction between what is conceptual or relational, and what is sensational, is of very great importance. But even the 'higher' mental elements, it will be shown, do not constitute cognition. The concepts, or categories, or laws of science, are not knowledge.

Much philosophical labour has been devoted to an investigation into the origin of these categories. It has been maintained that some of them at least, are not due to experience, but are the original furniture of the mind. It is more probable that all concepts owe their origin directly or indirectly to induction. Still this is an investigation which does not concern us here. The inquiry is, not into origins, but into values. Whatever their origin, the categories are not cognitions.

The grounds for this statement may be seen most readily if we consider some of the categories of Science. One of the most elementary of such categories is that of Quantity, which may present itself in the form of space, or in the more abstract form of number. It is, in one way, one of the most comprehensive of the categories. It is very remarkable, in the history of science, how mathematics has extended its sway over the sciences. One after another has yielded. But by its surrender each has apparently secured stability; the evidence of its identity with the other sciences, already annexed, seems indubitable; accuracy and demonstration take the place of vagueness and conjecture. Science is sometimes said to begin, when its facts can be stated mathematically.

It is useless to quarrel with this state of things, in consideration of what seem spiritual interests. In truth, now that the tendency of science is plain, one is rather disposed to think, as men have sometimes done since Plato's time, how natural it is. Since we think the world spatially, and all things in relation to space, it seems obvious that everything must have its mathematical value. But when we ask whether we are gaining any knowledge of the inner nature of the things we are so numbering and measuring, we need not reflect long to see that that is not by these operations revealed to us. The plant or animal examined under the microscope, so that its minutest structure is seen, contains a secret to which the observer is, so

far as such observation goes, an absolute stranger. To say that a particle of matter moves, with the velocity of one foot in the second, gives no conception of the inner nature of the body, or the inner meaning of its movement. The law of gravitation tells the measure of that force's action; there is truth in the common remark that it does not tell us what the force itself is; to no mathematical calculation does that mystery yield. It might not be too much to say that, while the forces of the universe are related to space, they are not spatial, and, apart from their relation to space, mathematics does not apply to them. It is at once seen how inappropriate it is to apply mathematical terms to mental realities; we cannot speak of the extension of a thought, or an emotion. It may prove to be equally inappropriate to apply mathematics to what is called physical energy, when that is considered in its proper nature.

It may be added that mathematics does not even reveal space to us. If space is real, it has a being which is most surely not disclosed in geometrical propositions. Those, moreover, who point to the antinomies connected with the conception of space are dealing with abstractions, not with what is concrete.

Another of the all-comprehensive categories of science is that of causality. It is also one that has more of an immanent character. The externality of quantitative determinations of the world has disappeared. This category stands on another footing. The cause is related as cause to the effect, by virtue of some intrinsic quality of its nature, which is embodied in that relation. It might seem therefore to be more truly a part of knowledge.

The criticism, which it first suggests, is that it is abstract. The concept is treated as if it had application to the whole universe, and had, in all its applications, practically the same significance. It is one form of connection which is generally thought to hold among all the phenomena of the material and moral universe. But when we turn to the concrete world, we find what a pale abstraction has been taken for the reality. It would be safe to say that, in the world of actual things, there is no relation which is repeated. All things are in flux, as Heraclitus said. All relations are likewise in flux. There is not the slightest reason for thinking the causality the same, when the sun raises the tide, when the spark explodes the gunpowder, when the lightning cleaves the tree. There is, further, no reason for thinking the causality the same, when two trees are struck by lightning; we are compelled to think the opposite. The causal concept is a mere generalization from our experiences; it is a compromise among them. It cannot be

regarded as an identical element in them, for it does not remain identical. Our concept holds of one case, at the best; probably it holds of no case at all. We have called it an abstraction, but it is scarcely entitled even to this name. If knowledge means resemblance to the reality, it is not given in this concept.

It can be clearly seen how far such a concept is from the living energy of things, if we consider, for illustration, human experience. Joyful tidings are followed by rapture; sorrowful tidings by grief; how far is the consciousness of the man, who passes through these experiences, measured by the scientific statement of the facts, in terms of causality? There is nothing in human experience, which resembles the idea of causality, except in so far as that category keeps the imagery of sensations of strain. In proportion as it becomes more purely a thought-relation, it becomes foreign to every living experience.

It may be said that the category of causality is merged, for modern science, in that of energy. Causal relations mean transformations of energy. The change does not directly help much. There is only provided another abstract universal. What actually exists is, not bare energy but energy in some particular form, heat, life, electricity; and even these are general names for particular phenomena. The criticisms passed on causality apply with equal force to energy. It does not any more than causality resemble any reality we know. Neither does it represent an identical part in a multiplicity of forces. Energy is not a *part* of heat, or electricity.

We may pass in review higher categories. There are concepts which commend themselves, as more fitted than that of mechanical causality to represent the spiritual process, and the universe as a whole. It may be said *e.g.* that the soul is to be conceived ideally, as self-realizing, not as a product of other forces, and it may seem that a statement of the facts, in the light of such a principle, renders them "intelligible." Yet it does not afford the knowledge sought after. This category fails like the category of causality. It has the fault of abstractness. Further, as a mental representation, it has nothing of the warm life of the reality, its agonies, joys, hopes. It scarcely resembles it more than *x* and *y* resemble the realities which they symbolize. It might have been expected that self-knowledge, at least, would be adequate knowledge. But the course of science has been such, that there is a gulf between Psychology and human life. It has often been remarked that psychological analysis destroys the capacity for the feeling, which is studied; it is a curious illustration of the breach in this sphere between knowledge and its object. Physiological Psychology has been designated a 'Psychology without a soul,' and, to many, the

designation has seemed to brand it. The Psychology that calls itself introspective is, in as fatal a way, a Psychology without a soul.

Similar criticisms might be passed on all the categories of Science and Philosophy.

But it is claimed that Science has to do only with universals. The foregoing criticisms seem to have sprung from the notion that Science has to do with the concrete reality. But Science takes interest in the concrete reality, only as it is thereby enabled to reach the laws embodied in it. It is not the empirical data, but the relations weaving them together, that it values. It is not to be denied that this is the commonly accepted account of the task of Science, including Philosophy. Were we, however, to concede this, we should be obliged to say, either that Science is not equivalent to knowledge, or that there is a large part of existence which is left out of its reckoning. It may be that the part of the universe, which it fails to appreciate, is the most interesting. In any case, it misses it, and so far fails to be knowledge.

Moreover, it misses the treasure poured at its feet, in order to lay hold of shadows. For, in the strict sense, it does not know universals, in so far as they are prior to, or apart from experience. It knows them only, at the best, as they are in experience. What they are apart from an experience like its own, it cannot know; for, to know them, it must translate them into experience. When it pretends to isolate them, it is only changing them from one mode of consciousness into another. We cannot step outside consciousness; we cannot know universals apart from experience. To say that our Universals, our Ideas, our General Laws are like the reality that transcends experience is like saying that we can tell colours in terms of sound; yet the illustration may be much too favourable to such a view. It is impossible for us to say that there is in the Absolute anything that resembles our universals. If we should venture on such statements as that the absolute includes these universals, as it includes all our activities, we yet should be far from saying that it is revealed, in its inner Being, by such universals. Such universals or categories are, as Kant insisted so often, the resource of a discursive intelligence; and for an intuitive Intelligence they might be altogether without the significance they have for us.

The view of some Hegelians might be appealed to. It might be urged that we know these universals only as in experience, that we never really separate them from experience, but only, by abstraction, consider them by themselves. The presupposition of this theory is that the only concrete reality is

given in self-consciousness. However, even were this granted, it would remain true that abstractions, from their very nature, cannot represent the concrete reality. But, in truth, this theory mistakes the true function of universals. It considers them only as entities found in reflective thought, not as attempts to know an object. While we consider simply *our* combination of things by a concept, the theory may seem plausible. We have joined *a* and *b* by the causal nexus, and we may abstract the category. When, however, we turn to the object, we see that the categories cannot be regarded as abstractions of this kind. There is *e.g.* an experience of the lower animals, which is not reflective, and in which, presumably, the categories, as thoughts, do not emerge; reflecting on it, we frame an abstract category. It is apparent that we have here an abstraction, to call it such, which is not of the order to which the theory says we can restrict ourselves. Far from being of such an order the category is produced as an explanation or representation of the object. Similarly, the universals which are regarded as giving the synthesis of human experience are those of which we are not conscious in the process of that experience; they are not abstractions from that experience; they represent attempts to know the mind as a thing in itself.

In his work, *Appearance and Reality*, Mr Bradley says that ideas are abstracted from the reality, and do not fully represent it. He even says that the Absolute is not pure thought. Nevertheless, knowledge of the Absolute is possible; the knowledge, even though abstract, is true. Mr Bradley offers no justification of this use of the terms, Knowledge and Truth, and the consistency of his statements is not apparent. There seems to be a somewhat similar contradiction in Professor Royce's brilliant work, *The Spirit of Modern Philosophy*. It is said that the categories of description do not reveal the inner nature of things; that must be 'appreciated.' At the same time it is maintained that we have a knowledge of the Absolute. But no reason is given why the categories of this absolute knowledge should be regarded as standing on a different footing from the others. They are still 'descriptive.'

What is the function of universals? Are they valueless? Probably they have a utilitarian origin. It is useful to the animal and to man to associate properties together. On the utilitarian basis, it is true, an intellectual structure has been raised. The concept has been an essay towards knowledge. But it has never been a successful essay. Its utility on the other hand cannot be doubted. It has the utility of a sign or symbol.

So far as our practical purposes are concerned, we do not

need to go beyond a set of signs or symbols. By their means we can sufficiently determine the relations of things to each other and to ourselves. If what we wish to know is the number of pounds a steam-engine will lift, or the number of miles a planet will travel in its orbit, it matters not that the sum is calculated by algebraic symbols, which serve equally well for measuring quantities of an altogether different kind. Again, to say that one thing is the cause of another, indicates a fixed relation of succession, and the concept's importance for our welfare is very great; we know in what order of time to expect phenomena, when once we have made this causal arrangement of them; we know how to produce pleasure and ward off pain. Any doubts that arise as to the value of the concept for knowledge are, from the practical point of view, irrelevant.

The concepts have their utility also for the intellectual life. They abbreviate the process of thinking; the mind can, by their help, pass quickly to the result desired. They bind the ends of the world together. They take for us the place of absolute knowledge. Our minds are finite; they are "discursive"; their experience is fragmentary. But by these concepts they have so related the elements of the world, that they can pass to any point, and, where they will, enter into more intimate acquaintance with reality. The meaning of this will be better understood later.

We conclude then that while our concepts, or categories, or Laws are useful, their utility is that of symbols. Berkeley says that language is a kind of Algebra. Prof. James says, that "it makes little or no difference in what sort of mind-stuff, in what quality of imagery our thinking goes on¹." We may say that a number of thinkers have had the same thought, but "it would probably astonish each of them beyond measure to be let into his neighbour's mind, and to find how different the scenery there was from that in his own." The trouble is that Science and Philosophy treat symbols as mirroring reality. Algebra, however, is not knowledge of an objective world.

It may be necessary to guard against a possible misunderstanding. Prof. James quotes Mr Lewes, who says that "philosophers carry on long trains of thought without pausing to translate their thought into images." It might be supposed that it would correct the errors of pure thought, to awaken in the mind a sense-image. But an external image of the object is not knowledge of it. We have seen that to have the spatial form of an object is not to have knowledge of it. It does not help matters to have that form painted with colour. The visual

¹ *Psychology*, Vol. I. p. 269.

image that arises in the imagination, gives us, at the best, only the most external characteristics. The visual image of a man is not knowledge of the man.

This brings us to the question whether there is any other mode of approach to the world, than that which is offered by Science. We find that there is the approach through sympathy or imitation. Art especially uses this access to reality. We have, therefore, to estimate its success in its effort to enter into the being of things.

Art is, in part, utilitarian; it ministers to the gratification of the senses. Harmonies of colour and concords of sweet sounds are by themselves sensuous. The arts which deal with such materials do not necessarily bring man into touch with objective nature. Much of æsthetic delight in nature is widely different from love of nature. Many people have found that they can get pleasure from autumn tints, or from songs of birds; they do not therefore love nature. They simply enjoy their own sensations.

There is however another kind of art which is more objective. It is probable that the theory which would explain all art as simply pleasure-giving is defective. Schopenhauer erred in not properly recognizing the sensuous element in art. But his work, in drawing attention to the objective interest of art, has permanent value. A complete theory of art must probably take account at once of what is subjective or sensuous, and of what is objective. It scarcely concerns us at present to vindicate at greater length this theory of art, provided it be conceded that art, for whatever reason, does call for a large and catholic exercise of the sympathies. It is art of this kind which yields knowledge. The drama is a good instance of such art. He who reads it, or sees it enacted, does not consider primarily whether he is having pleasant sensations. He has, for the time, taken on him the burden of the *personae*; he suffers with them and rejoices with them. May we not further say that he knows them? They are known to him as they are for themselves. Surely there is here a closer approach to the "Ding-an-sich" than science knows. Compare a dramatic representation, e.g. that of *Macbeth* or *Richard II.*, as it is found in the plays of Shakespeare, with the account given by historians. In the ancient chronicles, the incidents are mentioned in their proper order: their time-relations are noted; more or less is done to trace causal connections. The scene tends to assume that calm which is always found, when the categories of science have sway. There is little suggestion of all that formed the actual experience. This is more noticeably the case with modern history, which has carried still further the differentiation from

the epic. All suggestion of personal interests is eliminated, as far as possible. The characters of history are reduced to x 's and y 's. It is not thus that the dramatist deals with historical incidents. The characters are such as they actually were on the earth; we feel their passion. Macbeth is not a name for some phase of barbarism, which, again, equals x ; Richard is not a symbol for some epoch of monarchical government, or something similar, which in its turn equals y . They are living beings. Is it the poet, or the historian, that knows the history of these men? It is surely the poet, whose 'idea' most nearly accords with reality. Carlyle perceived this, at least in part, when he wrote, "The thing Shakespeare looks at, reveals not this or that face of it, but its inmost heart and generic secret; it dissolves itself, as in light, before him, so that he discerns the perfect structure of it." "To know a thing, what we can call knowing, a man must first love the thing, sympathize with it." Poetry is truer than history, it has often been said, the reason being that it gives an ideal completeness, that history fails to exhibit. There is a further reason for regarding poetry as truer than history. Even where it is not careful to follow facts in the precise order and form of their occurrence, it is yet presenting the true objective conditions of the lives that it contemplates.

The comparison of history with the drama is specially valuable, because the material with which both are dealing is a mode of existence that is like our own conscious life, and can be interpreted in terms of that life. The knowledge is not exposed to the agnostic criticism, that it is a mere play of symbols. One consciousness can reach the 'inmost heart' of another.

But poetry and other arts have not restricted themselves to human experience. They have tried to interpret the lower creation. As Schopenhauer is fond of telling us, the same living Will which is in man is found in the lower animals. Even more than the Poet, the Painter and Sculptor have sought to suggest this kindred life. It is also worth while to notice that in ordinary thought and speech, in which there are often evidences of that sympathy that is the source of art, there is a like construction of the animal life. Plant life has been similarly interpreted. Emerson quotes somewhere, the painter who said that in order to paint a tree, you must for the time be a tree.

Even the material world is, in the eye of the artist, a world that is living rather than dead. The name of Wordsworth deserves to be mentioned in connection with all such interpretations of the humbler forms of existence. To him the belief that the flowers 'enjoy the air they breathe,' was more than a lyrical ecstasy. In stars, clouds, "stationary rocks" and "moving

waters," as well as in the domain of organic life, he finds "Spirit."

It can be seen how widely this kind of interpretation of nature differs from the abstractly scientific; yet it may be claimed that it has more of truth in it. Even Science seems sometimes to transcend itself, and approach it: it has been alleged that work in the physical laboratory enlarges the sympathies.

There is one science which offers an instructive illustration of the two methods of interpretation, inasmuch as it seems to demand the adoption of both of them. The science is Psychology, and the illustration it affords deserves a careful statement. Psychology is physiological, and it is also, to use the common name, introspective. It is its aim, so far as it is physiological, to state all its data in terms of nerve-movements. It is believed that this is possible, and that if the statement should never be complete, the cause of the failure is to be found in the coarseness of our methods of observation, or in some more or less accidental obstacle. Thus our thoughts, our volitions, our feelings represent to the physiologist so many movements of nerve-molecules. Introspective Psychology deals with the same facts of thought and emotion, and if it has not been able to apply all the methods which make the results of physical science so accurate, it can at least claim that its facts are facts of experience. The thought and the emotion are as we feel them. Thus we have two orders of facts, the physiological and the psychical. How are the two related? Psychology, however unsatisfactorily it has treated facts of consciousness, has, at least, usually insisted on their difference from what is material. There is no resemblance between the conscious feelings and the molecular movements in the nerve-cells, and it has seemed impossible to regard the one as the cause of the other. It is common to say that they are distinct species of existence, and that they form a parallelism in which there is no interaction; mind-action accompanies brain-action without affecting it, or being affected by it. It may be doubted whether such a theory is in any way satisfactory. After all, when we are looking at these movements of brain-cells, what right have we to call them material? That which we actually get, is what might be called space-symptoms of something. It may be we are simply blinding ourselves with words, when we talk of this something, as matter, or energy. May it not be thoughts? May not they have space-symptoms? As we look at the brain, we have sensations spatially arranged; the reality which these indicate may be simply the consciousness familiar to introspection. The insertion of energy between these space-symbols and consciousness may be entirely super-

fluous. "Here," says Professor Royce, "in my world of daily experience, is my friend. If one saw him through and through, one would ultimately experience as the describable physical facts about him,—a quivering mass of molecules. Especially complex with intertwined spirals and streams of multitudinous molecules, would be each of the many tens of millions of cells of his brain. Thus my friend might be found. Nay, I have as yet found him not at all. I did not mean this maze of molecules, by my friend. I meant his intelligence¹." He explains the physical appearance by saying, that it is "simply the way in which the true and spiritual self must needs appear, when viewed by a finite being, whose consciousness experiences in the forms of our space and our time²." It may seem that we have chosen for illustration what is speculative and problematical. Now the main thesis propounded could be established without reference to such a theory. But the problems of Psychology bring this question of the nature of knowledge prominently forward, and such a theory as that indicated would be an interesting confirmation of what has been evidenced by a study of consciousness, under the guidance of introspection alone. It is readily apparent that the theory has wider applications. It may be that all so-called forces must disappear in forces that are like our consciousness. The only energy that we know, in its 'inmost heart,' is the stream of thoughts and emotions, which constitutes our mental life. It may be that all energy belongs to the same genus. When we look at what is called matter, we have only sense-signs. In our conscious experience we have the reality, for that experience is the reality; and it may be that matter should be interpreted according to the only reality we know. The theory of mind-dust may also be mentioned here. It is a kind of materialism baptized into idealism. According to it, the atom has a soul, or is sentient; and the higher intelligence is simply a product of a complex combination of these soul-atoms. The relations of this theory to the double-aspect theory indicated above need not here be discussed. Yet it is important to observe its idealistic or spiritualistic interpretation of material things. Idealism in this form may be crude. In all its forms it has, as a Metaphysic, been hasty and presumptuous. What here interests us is to observe in what various ways men are brought to interpret things after the analogy of their spiritual life. The world as we look on it and touch it, claims to have affinities for conscious life. And it naturally follows that a full understanding of it, if it is to come at all, can come only

¹ *The Spirit of Modern Philosophy*, pp. 405, f.

² *Ibid.* p. 411.

by that imitation and sympathy by which we understand our fellow-men.

The question may be asked, what are the relations of science and art? Should poetry *e.g.* increase and science decrease? Scarcely; at least the kind of poetry that should increase should be determined. Much poetry, that is deemed most beautiful, has no concern for truth. Even when not lyrical, it is arbitrary and fantastic.

Might we not say in truth, that one of our greatest intellectual wants is a new poetry, one that is not a mere opposition to science, but that follows the work of science and supplements it? Poetry should be freed from its vagueness, from its unjustifiable associations. For its own sake, it cannot afford to be careless. It should learn the lesson that science teaches of minuteness and scrupulousness in dealing with facts. Over the schools of the Poets, the words should be inscribed, "Let no one enter, who is ignorant of mathematics." In its construction of the world, it should exhibit the precision of science, but it should, at the same time, follow its own special method of interpretation. Where, to science, the reality is a realm peopled only by *x*'s and *y*'s, it might know things in themselves. It might afford an approximation to the Kantian "Intuitive Intelligence."

Science and art have often been treated as distinct; but it may be that this is to separate things whose conjoining is necessary to the integrity of human life. From the beginning it was not so. The earliest life of man, that of the animistic stage, was, in a sense, a life of poetry. The physical things around man were creatures like himself, to be punished or conciliated. Such a life cannot, indeed, be regarded as other than rude. It showed little sympathy; fear played a large part among its motives. Yet in its rude form it possessed the germs of a unity which should in a complete form be possessed by us, the unity in which the symbols of science are supplemented by the revelations of poetry.

More profitable than consideration of this primal life of man, is a search for the faculty, which is the source of knowledge and art. Imitation is a subject which has in the past been largely ignored by psychologists, though attention is now being turned to it. It seems to be the basis not only of science and art, but of a large part of morality. In the primal life of animals there is no concern for the objective. An animal sees food, rushes to it, smells it and tastes it. In the sensations of sight, of motion, of taste, there is, as we have already seen, nothing that reveals to the animal anything objective. This system of sensation-signs may become much more complicated without the transition to any higher mental stage. Even in human life, in complicated

actions, there is much of this mere play of feelings. Suppose that a man feels pain in his outstretched hand, and cries out; the pain reveals nothing of the external world; the outcry may similarly fail to indicate acquaintance with anything. It is very important that the exact value of this kind of mental life should be recognized.

But, in the evolution of the mind, there came a time when a more intellectual life dawned. When and how imitation started, are questions which can be settled only by careful historical investigation. They must, however, at present be passed by. It is sufficient here to indicate the general nature of the faculty. On analysis it proves to be a special case of association. Suppose that a man sees the wound in his hand, and feels the pain in it, wound-vision and pain-feeling are associated in his mind. There might be further associated with these the cry of distress, and the withdrawal of the hand. Let him next see a wound in his neighbour's hand, the pain-feeling, resembling the neighbour's, might be revived more or less vividly; and there might also be, at least in their incipient stages, similar movements of the muscles employed in calling out, and in moving the hand. The association does not necessarily take this course. In certain conditions, a man, at the sight of his neighbour's wound, would consider him weakened and so rendered an easy victim, and would proceed to slay him. But where the association in the mind is a counterpart of an external connection or association, there is Imitation. The above illustration may not exemplify the origin of all Imitations. What is important, is the conclusion it yields as to the relation of the internal association to the external. The experience of others is copied. In Imitation the narrow subjectivity, the abstract self-reference of the animal's primal life has been transcended.

Almost all the higher functions of the spirit are found, as has been remarked, to depend on the faculty of Imitation. The benevolent virtues take their rise from it. By means of this faculty it is possible to carry the sorrows of others: sympathy is, literally, suffering with. In other respects also, morality is imitative; it may take the form of imitation of an example; or, it may be imitation of the ideal man, that does not exist, except in imagination. Further, it is by virtue of Imitation that morality finds its greatest inspiration in the relations of concrete individuals. Examples fill men with enthusiasm, when moral precepts leave them unaffected. Sidney, in his *Defense of Poesy*, claims that in moral doctrine the poet "doth not only far pass the historian, but for instructing is well nigh comparable to the philosopher, and for moving leaveth him behind him."

From all this it is evident that morality, apart from the utilitarian effort implied in it, is not widely different from knowledge. "To know a thing, a man must first sympathize with it, love it." In his *Social Evolution*, Mr Kidd represents benevolence and intellect as opposed to each other in their effects. This is because the intellect is taken abstractly. When knowledge is at its truest, the opposition disappears. But, it should be added, morality forgets its own significance; it degenerates into obedience to a set of laws; even benevolence for the most part treats life as an algebraic problem.

Art, in many of its most important developments, is a growth from the root faculty of Imitation; it reproduces or copies the object. Should the claim be made that, in some cases, art, like morality, idealizes, it may be said that it is still realizing the object in its true being, but that the object exists only as a creature of the imagination. In art there has been remarkable fidelity to the principle of Imitation; it has many of the characteristics of science; in many important respects it meets, as we have seen, the claims of knowledge. It is by virtue of such fidelity that it gives so true an interpretation of human experience. It has shown, at least, the same spirit of fidelity in its interpretation of the inorganic world. Yet the power to produce pleasing effects is one which it has often cultivated, at the expense of truth; and many of its productions are 'begotten of vain phantasy.'

It is science that has, with most distinct and conscious purpose, set itself to imitate the reality. Its ideal has commanded the most faithful service. But the failure of science is apparent. Science devoted itself to the development of the general notion. It was in Greece, the land of art, that a principle antagonistic to art was developed. The leadership in this movement was assumed by Socrates and Plato; for while the notion had been employed by the thinkers before them, they were the first to exalt it to the supreme place in Philosophy. It is not difficult to see how its importance was magnified in their eyes. It was that which was stable and sure, while the things of the world were in flux. For Plato especially, it was the Absolute Being; the system of notions constituted the eternal and Absolute Being, that is incarnated in the world, yet is before it, and transcends it. Philosophy has ever since been largely under the spell of these great masters. Since the time of Socrates, as the history of philosophy tells us, it has been the task of science to establish general conceptions.

Concepts are unable to give us knowledge. Knowledge is imitation of the reality, and concepts do not imitate the reality.

In order to knowledge, Imitation must be perfect. The method of science must give place to a new method. We can now, however, better understand the precise value of these concepts. It has been already said that they, in a sense, represent to us absolute knowledge. It is not meant that they disclose the Absolute. We cannot even fall back on the category of existence, as predicable of the Absolute, for as ordinarily used, it does not apply to anything we meet with, and it would probably be mere self-delusion to apply it to the Absolute. The categories, as attempts at cognition, work out their own perdition; they hasten to their own Nirvana. It is often urged that, even to discredit them, we must employ them. It would be more correct to say that intellectual suicide would be the result of their consistent employment. We cannot negate their failure by continuing to use them. They are to be regarded as symbols; and, as symbols, they commend themselves as reliable. They can conduct the finite mind from one part of the world's experience to another. While it is true that the reality is always other than that given directly in the symbol, it is also true that the symbol is a clue to guide a mind that is finite in its experience from one reality to another.

There is one case of the employment of the categories which may demand a word of explanation. The play of categories in the mind could only be known, if mirrored by categories like them. Yet even in such a case, if these categories are strung together by another lower or higher category, the reflection is being distorted. Symbols and realities are mixed.

It may be well, before we conclude, to call attention to the limitations of our faculties, in applying the method of knowledge which has been explained. We seem to have gone on the assumption that we can reconstruct our own past experience with its original colouring, and that by sympathy we can reproduce the lives of others. Yet can we really recall our own experience? The illusions of memory are pointed out by the most elementary Psychology. "Wahrheit und Dichtung" are inseparably blended. We are not as we were when we had the experience, and the memory is affected by the new experiences that have crowded upon it. It is still harder to appreciate aright the lives of others. The difficulty increases as we try to understand the soul of the lower animals. Can we lower ourselves into that life, and make its interests, even temporarily, our own? Art has not attempted to a great extent to do this. Painting and Sculpture have been more free to deal with the animal, because they can faithfully reproduce the outer form, and render its suggestiveness, without any commitment of themselves to the definite interpretation of that form. The

inanimate world,—who can swoon back into that kind of existence? When poetry touches it, its language is indefinite. In every stone that frets the brooks, in the clouds, the stars, the light of setting suns, there is an "active principle," a "something." The limit of vagueness seems to be reached. There is, besides, a relapse into the scientific modes of expression. In such matters, our speech is still a kind of algebra. How far it must remain such, it would be rashness to predict. It may be that this method of interpretation will find applications which we can at present scarcely hope for. We have tried to show that only in proportion as we approximate to this understanding of man and nature, do we approximate to knowledge of them.