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IX.—THE STEREOSCOPIC CHARACTER OF KNOWLEDGE.

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"To us the Universe is a living whole which, apart from violence and partial death, refuses to divide itself into well-defined objects and clean-cut distinctions."—BRADLEY.

"Yes, sir, but a man is to guard himself against taking a thing in general."—JOHNSON.

"Thought's the slave of life."—HENRY IV, Part 1.

I.

IN ordinary intercourse as also in psychological and logical analysis, it is taken for granted that the mind in knowing an object proceeds in a linear series of stages from a point which marks the beginning to a point which marks the termination of the process. It is also taken for granted that in knowledge we somehow deal with the surface of the object, whether the surface be regarded as an outside "form," an external "quality," or an "aspect" of the object in question. Even when we are supposed to penetrate into the interior of the object, and to know its essence, the process of doing so is viewed as a linear process, that of piercing into its inner nature, and the essence obtained is considered to be an "aspect" or "inner surface."

At first sight these ways of looking at the process of knowledge would seem very different or even inconsistent. A linear direction and a superficies are not the same, and a surface is not simply a combination of lines. The connexion, however, between these familiar assumptions is not difficult to trace. A succession of linear directions will cover the surface, though it will not give a surface; and the surface, whatever more it

may be and however it may be derived, is at least partially a synthesis of lines. The two assumptions therefore work conveniently together and co-operate sufficiently to keep up the specious accuracy of the assumptions themselves.

If they were merely metaphors, perhaps little harm could arise from accepting them, though metaphors tend all too readily to be accepted as facts when they are constantly employed without criticism. We find, however, they are more than metaphors.

Knowledge is supposed literally to consist in a succession of stages, in the last of which we have the "truth," the preceding stages being then set aside or superseded. This is seen when a judgment is regarded as an act of knowledge detachable from the mental complex of memory and imagination which preceded it, and without which it could not take place, but which none the less are supposed in no way to enter into the truth of the judgment. Judgment is the climax of the process, and, being the last stage in the attainment of the end in view, is separated off from what preceded it and alone contains the truth of knowledge merely because it is the last stage in the process. Similarly an inference or a system of judgments is only realised after a process of thought, and when attained is held to be a self-contained body of truth as it stands, apart from the process by which it was reached: the preceding process is a mere succession of "events" in the individual's mind. In a word, when the process of knowledge is regarded as a linear series, the truth comes to be identified with the final stage in the series. The end of knowledge is identified with the termination of the process. The form of sequence in which knowledge appears determines the very conception of truth itself. Temporal succession is represented as a line, and the linear flow of time shapes our view of the nature of knowledge, and of the relation of knowledge to reality.

Against this conception it seems important to urge that the influence of the temporal form of the process of knowledge is

misleading, and when over-emphasised it is altogether mistaken. It would be easy to show in detail that it does not do justice to the facts of knowledge, and is inconsistent with its issue. Whatever meaning there may be in the statement that the truth must be the whole, at least it lays stress on what is vital in the operation of knowledge from first to last—the indivisible integrity of the individual mind. This must be our starting point in the interpretation of the nature of human knowledge. Within the confines of this form of individuality all processes of mental experience whatever, and the knowing process in particular, take place. From this concrete reality they emanate; its unity holds together, and is manifested in the various functions which constitute the several processes of experience. All temporal sequence takes place within some wider reality, is relative to that reality, and is not by itself ultimate. The flow of time is but the form of succession of events. The ultimate fact is not a mere succession, but a principle expressed in and through succession. The sequence is, in short, the appearance of the reality. It is the real, undivided and individual, which is both the point of departure and the final result expressed by the process. To take the process by itself is to misstate the situation. All this holds true of mental events as of all other events, whether they take place as a succession of changes in an organism or in a planetary system.

We must then start with the integral reality of the individual mind if we would understand knowledge—the special process by which the mind becomes aware of the meaning of the world of objects and in so doing establishes unity with its world.

Knowledge is, in the first instance, a specific expression of the vital energy of the individual. It subsumes within itself all the energies, organic, chemical and physical, which together compose the constitution of a human being. The individual is an organism sustaining its organic life with other organisms, interrelated with them through functions and

processes which never enter into clear consciousness at all; which are as yet only obscurely known, but which none the less effectively determines its existence. It is under the control of chemical agencies and physical forces in ways even more obscure but quite unmistakable. As a physical body the individual is as much under the sway of gravitation as any particle of inanimate matter. It is on the basis of these non-conscious conditions that the operations of knowledge take place. Knowledge is a specific conscious concentration of the whole complex of energies—physical, chemical, organic—making up the concrete human individual. When knowing, the mind does not merely utilise these energies to carry out its purpose, it contains them in its operation, gathers them into itself, and gives them a specific direction in the conscious interests of individuality. It is because mind involves in its energy the other modes of energy constituting the real, that mind can be regarded as at once the outcome and the fulfilment of the real. It is the apex of the pyramid, the nucleus of the entire complex system. Mind is continuous with and inseparable from nature, if we understand by nature the totality of organic and inorganic processes. For this reason it is alone in a position to give the "truth" about the world, for it sums up and brings to a conscious focus the various orders of facts which constitute the non-mental world.

Mind being so constituted, the operation of knowledge is in essence one way by which it seeks at once to articulate its continuity with its world, to realise in conscious form the energies it concentrates within itself, to establish its place as the final energy of the world, and to secure the independent integrity of the individual mind. These are but several phases of one and the same operation, and all involve one another. In carrying out this process its life and activity are one and single throughout; it operates as a solid global whole. It brings all its resources to bear on the attainment of its end, for its end is in the long run the realisation of itself as a single individual. Some

factors in the process are more relevant to the issue than others: and we may for purposes of abstract analysis treat the less relevant as irrelevant. But, in fact and in principle, the relevance is a matter of degree. Memory, sensation, imagination, and emotion are all implicated in the operations of judgment and inference, and are inseparable from their successful exercise. They are less relevant than conception, and more relevant than habits of will, or again than the circulation of the blood in the brain. But the difference is one of degree of remoteness from the final outcome of the process of knowledge: that is all. The whole complex of the energies of the individual is concentrated into the operation of knowledge, for that operation consists simply in the fulfilment of the life of mind in one of its various forms of expression.

II.

The effort of knowing is, then, a centrally initiated and centrally controlled vital activity. The actual starting point of the process of knowledge is a state of "desire,"* a condition of mental tension with an implicit end shaping its direction. How this is instigated it seems impossible to say definitely. We may imagine the psychic energy of a mind in continuity with a kind of larger whole of psychic energy, and we may suppose that it is the want of equilibrium between the mental energy of an individual and this greater realm which creates the state of emotional tension†. Or we might imagine that the state is due to an effort of mentality to bring to a single conscious focus and give specific direction to the lower unco-ordinated energies of psychic life, just as the energy of life may consist in concentrating into a single channel of activity the unco-ordinated energies of

* Aristotle, *Metaphysics I*.

† It is this view that leads to the suggestion that through knowledge man communicates with the Divine Spirit.

inorganic nature—chemical and physical.* Or, again, we can suppose that the activity of knowledge is due to the overplus of *the energy of the mind in contrast to that of the objects about it*—organic, physical, chemical—thus creating a sense of disjunction and separation within the real, which the mind seeks to remove by utilising its superior energy to establish harmony between the mind and the world of objects.† Or, finally, it may be that the singleness of the mind has to be maintained by active effort in the face of the varied world of objects, so as to recover or retain its place as one reality amongst other real beings; and one of its ways of doing so is to realise itself by articulating the meaning of other things.‡ All of these guesses are but hints at what must perhaps always remain one of the great mysteries of experience.

Whatever suggestion we make to account for the original constitution of this fundamental desire towards the self-fulfilment of individuality in which knowledge begins and in which it essentially consists, the main point is that it is with the indivisible integrity of the mind that the effort is made and carried on. The individual mind is stimulated into the activity of knowledge as a plant or an animal is stimulated into exercising the energies of life which lead to growth and development, which are the essential conditions of the maintenance of life. The realm of independent individual objects urges the mind, in ways unconscious as well as subconscious, to realise its own vitality to the utmost, and exert all its resources to secure itself as an independent self-directing individuality. Its obscure and inchoate unity is

* This would account for the conception that knowledge is a creative synthesis.

† Hence the familiar attitude which regards knowledge as a kind of necessary epiphenomenon, an over-consciousness of the "real" world, reproducing or "copying" the actual realm of things,—an elaborate work of supererogation.

‡ This is the source of the so-called pragmatist interpretation of knowledge.

drawn out into ever completer manifestation by the appeal of the manifold and relatively complete independent individuals* whose ensemble constitutes its environing world. And in being so drawn out of its implicit unity the mind is assured all the while that it is proceeding towards its own fuller self-realisation. It is not, however, simply to imitate or reproduce in its own case the independence of other real beings that it undertakes the process. No doubt practical activity is satisfied by securing a relation of working independence, which puts the individual at least on a level with other beings. But this process has in many cases a much more restricted interest for the individual mind than that of knowledge: it is limited by the kind of beings with which the individual enters into practical relation; some of these are so much lower in the scale of individuality than the mind that the maintenance of individuality at their level alone would, and in fact does, degrade the human mind.† Knowledge, however, aims at securing for the individual mind an independence adequate to its own level of individuality. The individuality of objects may be perfect in their order of being, without being equal to that of the individual mind. To obtain for itself complete individuality of its own order of being is the aim of the activity of mind in knowing. Hence it is that the mind, while stimulated into activity by objects, never takes their standard of reality as its own standard of truth. It always acts as if it were above them, superior to them, reduces them even to mere instances of more general and comprehensive forms of individuality. The limit of its process

* "Relatively complete" because knowledge finds or takes for granted that the real object is completely individual before the process of knowledge is undertaken. It is significant that we never undertake the knowledge of anything which is either chaotic, formless, or in the flux of mere change. We either assume the object is completely real before we begin or we wait till its reality is completed before we try to know it.

† *Cp.* the lowering mental effect of many forms of occupation.

is not set by other objects but by itself alone. In knowing, the mind, to use a familiar though doubtful expression, "transcends" its object; *i.e.*, has an individuality to maintain which is higher in order of being than that of the object. In a sense its cognitive relation to the object is but a stepping stone to the attainment of its high level of realisation, and partly because of this the object is invariably treated as inferior in quality of being to the mind which knows it.* In knowledge the object is a means not the end of the process; and so far from being an end in itself, it is, to use the current phrase, but material for knowledge to deal with. The subject-object relation as it subsists in knowledge is not one of equality of nature, order of being, or value between the factors constituting the situation. Hence it is that when the being with which the individual stands in relation is of equal or higher order with that of the individual mind, the attitude of knowledge is either not adopted at all or is only partially adequate to the situation in which the individualities stand to one another. This is seen in a peculiarly interesting way in the attitude of human individuals to one another in a society and in the attitude of the human individual to a Divine Being. In both cases it is felt that to speak of another human being or of the Divine Being as a mere "object" is either a figure of speech or a degradation. And the issue of knowledge which attempts to treat them as mere objects seems to justify this feeling. On the one hand, we have the statistical view of human life, which by reducing human individuals to instances of general laws—*i.e.*, larger individual wholes—lowers the sense of the value of the single individual; on the other, the naturalistic interpretation of human beings, which leaves

* This is one of the most interesting peculiarities of the attitude of knowledge, and distinguishes knowledge in a characteristic way from practice. It gives knowledge the quality of detachment and freedom found to some extent in the mood of play. In practice the individual wrestles with his object as with an equal.

nothing but a difference of complexity to distinguish human life from that of sub-human animals and even inanimate things. The opposition felt to both of these is in the long run not strictly logical, but due to a revolt of the concrete individual mind against the attitude towards human beings implied in the attempt to exhaust human nature by purely cognitive processes, *i.e.*, to regard human individuals as mere objects to be known. An appeal is made to the "heart" or to practical life to defend the individual against such seeming degradation; or it is insisted that knowledge is "unequal" to the task of knowing the human individual at all, because this would require that the agent knowing should in some way know himself and know his own knowledge as well. Indirectly the same objection is confirmed when for the comprehension of the human individual it is urged that we must adopt the attitude of "Love" as well as "knowledge," and regard him as an end in himself, but not as a mere object but as a subject. The subject being itself a cognitive agent, cannot be treated as a mere object, even when the subject is another person. And in social life it is found that we do not merely "know" other human beings, we feel with them, are interested in them, in a word unite ourselves with them in ways different from and more than that of mere knowledge.* Similarly the attempt to treat the Divine Being as a *mere* object of knowledge has always been felt to be shadowed by defeat from the very first. This is not simply because the object is so vast relatively to the puny individual agent who undertakes the task. Size is irrelevant; and the human mind can grasp by knowledge objects immensely greater in extent than the finite individual, more durable in time and more comprehensive as individualities. It is rather that the

* Hence it is that in historical theories of knowledge the discussion, as a rule, centres round the cognitive relation of the mind to objects of "nature": the discussion of man's relation to man is relegated to another inquiry. No analysis is given of how man "knows" man, except in so far as man has a physical or organic embodiment.

individuality of the Divine Being is in quality and order of existence admittedly higher than the human individual, and the fulfilment of human individuality through the process of knowledge does not require to be established in the face of such a Being. The attempt is unnecessary, and is futile from the start—knowledge is but one channel through which the concrete individuality of man is realised and fulfilled. An absolute individuality, which in some way contains, and is in every sense superior to, that of man, must, in order to enter into any relation with man at all, call forth all the sources of man's being simultaneously, and in undivided unity. Man's relation to God must be established in terms of feeling, will, and knowledge, in terms of beauty, love, and truth together, through all the channels of his mental life is short, and not by any one of them alone. Hence it is that men approach God through feeling, through practical action, and through cognitive processes, alternately or by arbitrarily selecting one as their primary channel; and never suppose that one by itself is enough for the fulfilment they seek through conscious communion with such a Being. Hence, too, the current use of "faith" either in addition to, or in distinction from, knowledge, as the principle of union with the Divine Being. And hence indirectly the failure of all attempts to interpret God's Being in terms of knowledge. When the attempt is made, and God is treated as a mere object of knowledge, it is invariably found that the object is an unknown, an unknowable, an unfathomable, an abstract "entity of reason," *i.e.*, a God away from man altogether and without the complex richness characteristic of a concrete object of knowledge. God is *made* into an object at the price of losing the essential significance appropriate to a superior order of Being, and the issue of such knowledge is thus in plain discordance with the initial character of the Being which the thinker sets out to know. To be treated as an object is to be lowered beneath the level of the cognitive subject; and when the object in question admittedly transcends all

other objects of knowledge it becomes a bare substratum of objects in general, less in actual content than a finite individual object. Hence the paradoxical result, the transformation of the Supreme Being into a mere object of knowledge turns this object into a lower order of being than that of any finite object whatever. It becomes a bare object, indistinguishable from nothing, a mere abstract limit to knowledge itself, because it has the lowest limit of meaning of any object—mere Being. The attribute “supreme” remains, but only as an empty compliment passed by the knowing subject on the object in deference to the inquiry undertaken; the attribute is not justified by the results attained. In point of fact such a Being at the end of the process of knowledge tends to be supreme only in its insignificance.

III.

The undertaking of knowledge, then, engages the energies of the individual mind in the interests of self-fulfilment in the face of the equally independent objects with which it is environed. It is limited from first to last by this consideration: the mind has to realise its own special order of individuality, which is felt to be higher than that of the objects with which it deals. It always feels itself equal to its task precisely in consequence of this initial superiority which it possesses; and the result justifies its claim. The objects it knows are interpreted in terms which partially express its own constitution. The individual mind is in part a complex of physical, chemical, and organic factors, and these it shares with other beings. It is with objects of such a character that its knowledge is in the first instance concerned, and with these its efforts are in the main successful. As a mind, conscious of itself as mind, it is above their order of being; as an individual mind it consciously concentrates all their energies into a single individuality.

In realising its individuality through this process, it proceeds in a succession of stages, in each of which its individual life is expressed, and none of which can be dispensed with in its effort after complete satisfaction. The emotional attitude, which is the starting point of every process of knowledge, is the intermediary between the organic embodiment of the individual mind and the higher conscious life. The organism gathers into itself the inanimate energies of the individual, and carries with it all their reality. In an emotion the organic is transformed and concentrated into a conscious direction of the mind towards a fulfilment of individuality. Hence it is that in taking up the attitude of knowledge the mind always feels itself rooted in reality from the first, and is never away from the real, never carries on a process which is over and above the real world or independent of it. Knowing is an actual function of the real which is carried through by that form of individuality in which all the other energies of the actual world are summed up and unified. It is thus that in knowledge the mind is in communion with and communicates reality; it communes with the real because it is through and through continuous with the substance of the world; it communicates the real also because it expresses in one form the active energy of the individual mind, which is an epitome of all reality. It is not because the mind and the world are opposed that knowledge takes place or is demanded;* it is because they are in continuity that knowledge is even possible. We may, indeed, draw a distinction between the mind and the rest of the real, or even between the mind and the body. And it is certainly true to say that knowledge is a mental process alone. But it is not *in virtue of* this distinction that knowledge takes place, but in spite of the distinction. The indivisible continuity of mind with the world about it is the very inspiration of knowledge and the guarantee of the success of the effort. Hence it

* This view is entirely based on the perceptual view of the situation.

is meaningless to speak of the mind "copying" the nature of things through the process of knowledge, or "reproducing" the order of the world in intelligible terms. This precisely inverts the actual situation; for it implies that the mind brings nothing new into the real, that the real is complete by itself without mind, and that mind can at best but duplicate in shadowy form a finished substantial reality. The real is not even known to be complete until mind gathers up all its substance into itself. It is impossible to "copy" until we know the original, and this means that the knowledge of the original cannot itself be a copy. It is equally impossible to 'copy' until the original is fully present before us; but if the mind is required to complete the real, the original is not in existence till the mind is there—or otherwise the so-called 'copy' is itself a constituent factor in the original. Nor can we "copy" unless the transcriber is outside both the real and the material to which he transfers the original form; the artist cannot himself be the copy and the transcriber in one. Nor again does the mind give us a "reproduction," in any other sense, of the real; for the real must be ripe before it can be reproduced, and it is not ripe till mind has supervened upon and consciously focussed the non-mental levels of reality. And any "reproduction" must give us the real over again in a like independent substantial form; but transparently knowledge neither creates nor procreates a real independent of its own being. What knowledge reproduces is a mental product pure and simple, which may be incorporated in physical symbol, such as words or letters, but these are merely artificial aids to knowledge, not real beings by themselves. This mental result can certainly be reproduced time after time, by the same mind or in different minds; but every time it is a mode of mental life, not an individual existence independent of mind. And in general it seems absurd that reality should ever require to be "copied" or "reproduced" in any sense. The original is enough to constitute a part of the world; nothing

less will suffice to constitute a part, and the original is good enough for all purposes, we may be certain. A copy is a poor substitute for an original, and a needless addition to it. Of all individuality it may be said that once is enough. What the mind strives for in knowledge, what reality achieves by the process of knowledge, is fulfilment of being in conscious articulate form, a fulfilment which is an expression of the life of mind, a realisation of this highest order of individuality. Mind has laws and conditions peculiar to itself, and by these it carries on and carries out its own peculiar life. In realising itself through the process of knowledge it operates according to these laws and conditions and no other, and does so for its own sake and for nothing else. Physical beings as such, and organic beings as such, fulfil their order of individuality by laws and conditions peculiar to themselves. The activity of mind subsumes these other orders of reality; they make possible the activity of the concrete individual as a conscious concentration of their energies. In fulfilling itself, the individual mind fulfils all that they contain and are; and over and above fulfils its own level of energy as well. In that sense mental activity in general, and the activity of knowing in particular, is the fulfilment of the world in which we are placed, is in a sense its final outcome, and thus its supreme end.

IV.

In the execution of this undertaking, the concrete individual proceeds gradually. It meets other beings at their own plane as a first stage. Its effort is directed first towards establishing itself in relation to them in terms of their specialised embodiment. It becomes conscious of them on the outside and by way of spatially constituted physiological functions—the sense organs of the organised embodiment of the individual mind. They do not act of themselves, the mind operates through and in them as a concrete individual in the interest of its self-

fulfilment ; all its potencies—memory, feeling, imagination and emotion—are to some extent involved in the operation. Moreover, because the operation is a reaction of the individual on an independent individual object. The mind is conscious of the solid reality of the object from the first, though to begin this is only felt as a restraining limit to its own expansion and an incitement to its fulfilment, at once drawing the mind beyond its immediate state and compelling it to sustain itself in relation to the object independent of itself.

This mental operation through sense functions—sense-perception—is found, simply by the process of the experience of knowledge, to meet only the first demands of the mind and the outside or superficial character of the object ; and these two go together. The mind certainly satisfies itself to a certain extent in the process ; it arranges sense-qualities in an order of place and succession. It thus realises the meaning of the object, and in so doing realises its mental life at the same time. It maintains and secures more firmly its individuality as a real among reals. But the outcome of the process at this stage is merely to throw into still stronger relief the independence of the objects. Knowledge does not merely substantiate the individual mind, it substantiates the objects at the same time. They become more real for the mind the more the mind knows about them. The constituent factors of the objects become distinguished, and so related, in a way that is not found at the earliest stage of emotional interest in the object. Their parts are differentiated from one another ; the reality of the object becomes a whole of such parts : the objects themselves as separate beings are found to have points of contact and connexion with each other, to share similar elements. This discovery of fuller knowledge, obtained on the completion of the first stage—the use of sense-organs—draws the mind on to a further reaction, to a further establishment of its being in relation to other beings, to a further fulfilment of itself as an individual. Just as practical action commits the individual

to a more prolonged activity as soon as the first active step is taken, and in a manner creates the necessity to take further action simply because he has made the first venture; so in the case of knowledge. Knowledge both allays activity and awakens new activity, finds solutions and sets problems, gives answers and raises questions. In the long run this is due to the incessant and inevitable interrelation between the individual beings constituting the real world: action and reaction, continuous interdependence is the condition by which all independence is sustained.

The exhaustion then of the potencies of perception compels the mind to undertake a further stage in the process of knowledge. It can do so seeing that the mind is a richer order of being than the object. And it must do so because it has other ways of exercising its unity than through the organs of sense, and must function in these ways. Further, the very process of co-ordinating the meaning of the object in terms of sense-experience has put the object in a new setting altogether and thus necessitated a further effort of synthesis. The mind has no specific physiological organ for the function it now brings into play. It calls upon the deeper resources of its individuality, those which more directly express and manifest the central unity of its life, and in that sense seem to the conscious mind to be more nearly its very self. This distinctive function is the activity of thought, which, whether in the lower form of ideas or the higher form of conceptions, is the energy of unifying diverse elements in a manner which realises in specific form the pervasive single unity of the mind's individuality. It has the character of identity or constancy of function peculiar to this all-encompassing unity; and hence the functional exercise of this unity is the source of generality and universality of thought.

The unity of individuality is certainly involved in perception, but it is implicit; it is the unity of an organic function structurally determined and uniform in its operation. In

conceptual activity, the highest form of thinking, the unity is explicitly and, indeed, deliberately brought to bear on the situation. Hence it is that thinking in the highest sense has all the character of purposive activity, an end set before the mind which it seeks to reach by an effort all its own. And since the thoughts evolved are the mind's self-devised functions for realising its own single unity, the mind invariably finds itself and feels itself freer in the exercise of the function of thinking than in the activity of perception; so much so indeed that the mind even takes upon itself to choose not merely how and when but what it shall think. In perception there is always a certain measure of constraint and even compulsion imposed on the mind.*

The eye it cannot choose but see;
We cannot bid the ear be still;
Our bodies feel, where'er they be,
Against or with our will.

In thought, however, the mind is liberated from this external thralldom and moves in a direction determined by its own inner, *i.e.*, essential nature.† Not that there is no joy in mere perception, no sense of fulfilment: but it is akin to the joy of healthy organic functioning, and is partial because localised in a certain region of the body. In thinking, the whole mind is suffused with a sense of being present as a single unity in the transaction, and hence successful thinking brings a fuller joy, a completer sense of fulfilment, and so of greater freedom.

* It is partly for this reason that most people have felt a certain reasonableness in the suggestion that our senses might well have been differently constituted, both in kind and power. No one is much impressed by a like suggestion in the case of the activity of thought.

† It would be interesting, though not perhaps very profitable, to ask why thinking should be a later stage of the knowing process than perception. One can imagine a mind which begins to know by conceptual activity, or even carries on the process of knowledge by conception alone. Probably *we* begin by perceiving because we are alive as organic beings before we become more alive through conscious effort of our own.

It must not be supposed that by this new reaction of the mind, this new advance of mental life, which takes place in thinking activity, that the mind in any way withdraws *into* itself. This is the familiar misinterpretation of the process of "reflective" knowledge. Such a view confuses the mental act of drawing upon the mind's fuller resources with an act of withdrawing from the realm of perception altogether. If the mind did so withdraw, the operation of reflective thinking would inevitably be in the end as incomplete and unsatisfying as that of perception whose incompleteness demands the new effort of the mind.* In point of fact, however, the mind finds greater fulfilment, as a concrete individual, from the course knowledge takes after reflective activity than before it. This means that what perception supplied is not dispensed with but resumed and recast through the operation of thinking. The mind may for the moment when calling upon its greater resources detach itself from perception, but its action is that of *reculer pour mieux sauter*. And even those who take this abstract view of the nature of reflective activity have to admit that it is inaccurate; for they, at least generally, speak of the need of "testing" reflective thought by an "appeal" to perceived facts, *i.e.*, they confess that the detachment does not really take place at all.† But the significance of the new step

* This can be abundantly illustrated from the history of logical theories, both those which treat perception as primary for knowledge and conception as secondary, and those which treat conception as primary and perception as secondary. The whole movement from Locke to Kant is permeated by this misinterpretation, and it still prevails in current logical theory, *e.g.*, Bradley and Bosanquet, largely owing to Lotze's influence.

† The relation between conception and perception has to be expressed in this external way by those who look upon them as detached from the start. The absurdity of the view is further indicated by the very attempt to bring them together again in this external way; for the "test" is obviously reciprocal, perception "tests" conception, conception "tests" perception. But what "tests" the "test," if they are, in fact, external to one another?

is not to be found in such an external relationship as that implied in the use of one to "test" the findings of the other. The reflective activity is a further and fuller expression of the same principle which operates in the perceptual phase of knowledge. This principle is the realisation of the individual mind through the process of apprehending the nature of the object as an independent being. It is the unity of the individual mind which is manifested in each stage, and operates in both alike. And reflective activity gives a richer cognitive experience because it carries with it the acquired achievements of the earlier stage, because the mind brings to the focus of its single unity the specialised functions of perception, grasps by the conscious exercise of its unity the diverse results of the spatially constituted organs of perception in which the unity of the individual mind is least implicit. Reflective activity can only be a greater fulfilment of the cognitive process if the greater exercise of the mind's unity includes the less. To exclude the less is either to impoverish the mind when making the new advance, or to put the two on an equality of value. Both are impossible if it be the fact, as it is accepted to be the fact, that in reflection the mind does increase the mind's cognitive union with the object. The increase is an increment to the experience of knowledge, not a mere numerical addition to the previous stage of knowing. The object, as the result of reflective activity, assumes for the mind a more solid substantiality, a greater permanence and a more coherent individuality. The individual mind, on its side, establishes itself more firmly as a consciously independent real being, is more completely aware of its own existence, and has a more abiding sense of satisfaction and fulfilment. Subject and object, in short, become more reciprocally independent because of the increased conscious interdependence brought about by the later stages of knowledge. The fuller individuality of the mind deepens the sense of that of the objective real.

It must not be supposed that the advance in knowledge made

by reflection transforms or even changes the qualitative distinctness of perceptual knowledge. However intimately they are connected on the basis of their common principle, the later does not alter the peculiar character of the earlier stage. Perception in a word does not grow into reflection, and in so doing lose its specific quality as a mode of knowledge; as a bud, for example, ceases to be a bud when it becomes a blossom. This is another familiar misinterpretation.* Perception makes its own unique and intransmutable contribution to the life of the process. There is no substitute for it, and no way of supplanting it or superseding it in its own kind. So much is this the case that it is possible in principle, and seems a fact of cognitive experience, that a mind can be confined to the level of perception, and never pass beyond it. This seems mainly the level of the purely animal mind. In human knowledge, reflection, we find, can also operate by itself, *e.g.*, in abstract mathematical reasoning. But reflection can never give us precisely what we have in perception. The conceptual construction of a theory of light or sound, be it ever so accurate, cannot render to us the organic reality of a glowing colour or a thrilling note. The theory of art is not by itself a substitute for, or an improvement upon, the perception of the landscape on the canvas, or the ordered sequence of notes constituting the musical symphony. The latter is not to be had by analysis of the theory, either by way of derivation or illustration. We cannot hear a sonata better by knowing the theory of sound or even the theory of musical composition. No conceptual activity whatsoever can conjure a single perceived fact or perceptual act

* It is found most usually in so-called idealistic views of knowledge: just as the supposition of an external relation between perception and reflection is the characteristic error of the mechanical theory of knowledge. The former looks on them as moments of growth—the latter as superimposed layers. Both are mistakes for the same reason: they treat the stages apart from the unity; they both ignore the fact that it is the concrete individuality present in earlier stages which manifests itself in each, but with greater fullness.

into existence as a form of knowledge. The two are qualitatively distinct as stages of knowledge, and each unique in kind in spite of, indeed because of, being in the long run specific expressions of the single activity of the one individual mind directed towards the end of realising itself through the apprehension of the meaning of the real objective world. They are neither superimposed on one another, the later or the earlier, the higher or the lower, nor abstracted from one another, nor does the greater grow out of the less. The deeper apprehension, the greater knowledge, is a new creation of the energy of the mind, as distinctive in its order as that of perception, and as distinct in kind as one organ of perception is from another.

Just as the individual mind operates in its undivided integrity in an act of perception, bringing to bear on the present its consciousness of the past—memory—its synthesising function of imagination, its conative force, and its feeling states, so in the operation of reflection the mind concentrates its undivided energy into the prosecution of this further stage of knowledge. Reflective activity is not carried on in abstraction from the other constituent functions of the mind. Its essence lies in a completer utilisation of these functions for the purpose of achieving an increased apprehension of the nature of the object. It calls upon the resources, and assumes in its process the concurrent exercise of memory and imagination, conation, feeling, and always to some extent perception. The necessity of the last for reflection is seen in an interesting way in the operations of so-called pure conceptual activity such as we have in mathematical science and philosophy. For while the manipulation of pure concepts seems to take place independently of perception, so organic is perception to the process of conception that where direct reference to a given perceived object fails, the mind creates for its purpose such a reference and makes use of symbols which appeal to the eye or the ear. Conception cannot accomplish its task without the aid of written or spoken symbols

a singularly interesting proof of the organic connexion of the operations of perception and conception; and an equally interesting confirmation of the view just indicated—that in reflection the mind takes up a higher and yet unique attitude of knowledge—to find the mind in “pure” conceptual activity creating for its own purposes perceptual symbols to effectuate the realisation of its larger sphere of knowledge. That the mind does so in the case of reflection is precisely due to its being a greater expression of the mind’s energy; the mind in reflection, so to say, overtops the limits of perception, finds perception inadequate to its demands for completer fulfilment: and because perception is none the less organically necessary to its larger activity, the mind signalises its transcendence of the limits of perceived natural fact by contriving mere perceptual symbols to correspond with and to meet the abstracter aims of reflection.

V.

The mind never thinks with mere detached conceptions alone; the individual mind is engaged as an integral unity in the operation of conceiving the object. Its aim is to establish itself as individual in conscious interdependence with individual objects; and for this purpose it carries its concrete individuality into the process. The different conceptions it devises in the execution of this aim, and the different steps by which the operation of reflection is articulated—judgment and inference—are but several manifestations of the undivided unity of the mind’s life in the process. They are never detached from one another, neither from the unity of the mind nor from the unity of the aim it has in view, nor, again, from the singleness of the object it seeks to know; and these are but distinct ways of looking at the same concrete experience. The various conceptions originated by the mind are called for by the variety of independent objects in relation to which the mind’s unity has to be sustained. They cannot

be known in advance of experience, but only in the experience of knowing the objects: in that sense they are always derived from experience. They are not, however, "discovered" by experience as if they were there waiting to be found out by the mind: that is once more a mechanical misinterpretation of the facts. They are operations of the mind's energy exercised in realising its unity in the face of individual objects; and we can no more speak of them being "there" before these operations are performed than we can speak of leaves and branches being "there" before or until the living energy of the tree has elicited them into being. What the term "discovery" really means to convey is that the conceptions when devised are necessary, or are "objective," and not accidental. This is true; but it is a truism. For it merely emphasises the fact that the conceptions are the vital and essential functions of the mind's unity, and that they do articulate for the mind the meaning of the object; and this is but saying that they are conceptions or cognitive operations. The mind does not create conceptions for amusement or in play, but to sustain its consciousness of unity as the vital necessity of its life; the conceptions share this necessity which urges the mind to maintain itself. But they are relative to the mind and its needs, and in that sense are constituent conditions of the process of self-fulfilment, not separate self-existing entities either primordially "innate" in the mind or externally and eternally immanent in the independent object. In a word, the object alone is independent of the individual mind, not the conceptions by which and through which the mind realises for itself the meaning of the object and in so doing fulfils its own peculiar order of being. The only independent mental reality is the individual mind itself as a concrete unity; the conceptions are no more separable from or independent of the mind's unity than the beats of the heart are independent of or separable from the energy of the heart's single action. What shape the conceptions

shall take, how many they shall be, and how comprehensively they shall express the unity of the mind—all this is not merely relative to the individual mind, but in a manner historically contingent on the character of the individuality engaged in the operation of knowledge. Hence it is that conceptions vary within limits from individual to individual, from race to race, and from society to society. There is no historical or logical basis for the view that there is a self-closed final catalogue or scheme of categories. The construction of a "system of categories" is inspired partly by the misleading influence of mere language, which is a mere historical accompaniment of the human mind and varies with its needs; partly by the application or rather mis-application to the special material of verbally embodied conceptions of the artistic imagination which seeks to give the rounded arrangement of an artistically complete whole to the miscellaneous conceptions employed by the developed intelligence of a civilised people and expressed in their language; and partly by a false interpretation of the ideal of knowledge and of the relation of the unity of the mind to the knowing process. The unity of the mind being undoubtedly that of a single individual, it is inferred that the ideal of knowledge must also be at the other end of the process an indivisible and independent unity; and since the unity of the mind in knowledge is consciously and, at its highest, expressed in the form of conceptions connected or otherwise, this terminus *ad quem* of the process of knowledge is imagined as a single compact system of such conceptions. The supposition that the end of knowledge must be found in the construction of such a system is little more than an elaborate illustration of the fallacy of composition. Because the unity of the mind is realised in definite and discrete conceptions, it is inferred that the supreme expression of its unity will take the form of a single conception containing all its conceptions; because each successive act of knowledge involves the unity of the mind, therefore the complete unity of the mind is a single

act of knowledge in which its whole unity is realised all at once; or, again, because the mind is fulfilled in operations realising its unity, therefore its supreme unity is realised in a single operation containing all its functions simultaneously. As truly might we offer the authorised biography of a man as the equivalent of the man's life or as the ideal and fulfilment of his activity; a record of the beats of the heart for the vital energy of its existence. But for conceptions being stereotyped in language, the attempt to construct such a system would hardly have suggested itself to anyone. It is not the aim of the mind in framing conceptions to seek fulfilment in either a supreme single conception or system of conceptions. The individual mind is the one source and centre of its conceptions, and these but bring forth its unity in special cases to meet special situations. It could never secure final fulfilment in any one conception, however comprehensive, for the simple reason that life of the mind, like that of any organism, consists in actual activity not in coming to an end of itself, in living not in having lived. The mind in energising in knowledge is constantly finding fulfilment and satisfaction; it does not seek to secure a single supreme state of satisfaction. The fact that the mind embodies its unity in conceptions does not, in a word, either imply or even suggest, still less require, that there should be a single and self-complete conception or system of such conceptions; for to attain such would be to extinguish the very fire it is meant to sustain. The end of knowledge is not an ideal conception, but mental satisfaction or fulfilment, and this is not one final state but a variety of states in which the single living individuality is realised, sometimes with more completeness, sometimes with less. For the mind a less comprehensive conception is relatively just as necessary to the mind's life as a more comprehensive, for through both it sustains its individuality in the face of the world of objects. In the strict sense a conception is not the mind's unity at all but a function or operation of that unity. The unity of the mind is

nothing less than the whole individuality of its being as a spatially organised embodiment of mental energy. Neither in the interests of knowledge nor in the nature of conception is there any ground therefore for constructing a system of conceptions. Conceptions only subsist in the operations of the individual mind, no matter how many there may be or what their character.*

The difference in kind amongst conceptions presents an interesting parallel to the different kinds of perception; and the difference is certainly as real in the one case as in the other. At first sight it might seem possible to reduce (or, as it is sometimes said, "deduce") one conception to another, *e.g.*, quality to quantity, purpose to mechanism, or even all of them, to one supreme conception, for example, unity or order. And the attempt has often been made, and probably will always be made. The search for the philosopher's stone has all the fascination of an elusive phantom, and a phantom which persists, gains through its very elusiveness some of the characteristics of an ideal. An obsession may assume the quality of a baffled instinct and be as difficult to eradicate. But in spite of all the efforts the mind has steadily refused to admit that one conception which it devises and requires to secure its sense of unity can be replaced or displaced by another. The long struggle for cognitive primacy between mechanism and end sufficiently demonstrates this; and it is typical of every other case. Every conception expresses the mind's function of unity, but each conception is not its bare unity, but a different embodiment of its concrete individuality of action. The reason why the effort to reduce

* The attempt to treat a system of conceptions as the objective totality of the mind's unity, as the completed utterance of the mind, and therefore as equivalent to the mind itself, is in the long run a purely mechanical view of knowledge. It treats the mind as a machine whose product is the mechanical equivalent of the energy exerted in the process of knowledge, just as the work done by an engine is mechanically equivalent to the energy exerted by the engine. So that the mind's energy just equals the system of the categories.

all forms of perception to one form has not been so persistent is merely that the differences between, *e.g.*, eye and ear, are so palpable that it seems folly to pursue the attempt. Touch, it is seen, may be common to both ; just as sensitive responsiveness is common to both ; but this community only throws into greater relief the irreducible difference between their operations. The modes of perception are separate channels of mental communion with other objects, and have their bounds and quality determined by the statutory framework of the constitution of the individual organism.

The conceptions, again, are not generalisations from other cognitive experiences, whether it be percept or image. They are ways of grasping the meaning of the object as an individual reality ; and as expressing the unity of the mind's life they are universal operations of this unity, ways in which the single mind, the enduring agent in the process, invariably works to secure its sense of individuality. Generality is an attribute of a universal, but not its essence, and a mere generalisation, where it is not simply an exaggeration due to the play of imagination, may give knowledge in "a general way," but not knowledge of anything in its individuality. All knowledge is directed upon and towards individual objects ; and to know a "thing in general" is not to know anything at all. And even if conceptions could be regarded as generalisations of percepts, this would still leave unexplained how the mind comes to take the step. A perception of an object is genuine knowledge, and *quod* perception needs nothing added to it to make it knowledge in its own kind. A generalisation of a percept is not demanded by perception ; but is due to some other function of the mind's life, and must therefore have another interest in view than that supplied by perception. A mere generalisation of a percept would add nothing new to knowledge at all. It would add nothing to the validity of the perception ; it would not be another kind of perception ; and since it would be tied to perception, it would not advance the

mind's knowledge to a higher degree of fulfilment. It would be an unaccountable excrescence on the tree of knowledge.

VI.

The advance which the mind makes at the conceptual level of knowledge is brought about by successive reactions of its unity on the increasing complexity of the object which comes to light as each act is consciously made to grasp the object in its integrity. The meaning of the object increases as the mind finds more meaning in it, and the process can therefore only cease in either of two ways: either the object presents no further complexity to be grasped, or the mind has no further resources to meet the complexity of the object presented. The complexity presented by the object is always ahead of the effort of the mind to meet it, and generally not far ahead, otherwise the mind becomes temporarily overwhelmed, as indeed happens in familiar states of mental perplexity. To prevent this from constantly recurring, the mind deliberately and artificially restricts the range of content in the object to its capacity to meet the situation. It "abstracts" objects from a larger whole, divides objects from one another, "isolates" its objects for purposes of investigation. The restriction within manageable proportions of the complexity of the objects dealt with enables the mind to react gradually on each complex situation as it arises. The reaction takes the form of connecting the different portions so far unified by the functions of judgment and inference. These operations are acts of integration made by the mind to secure unity and order among conceptions, and as a result to give a completer consciousness of the individuality of the object than is possible by the use of separate conceptions. The form which this act of integration takes in the case of the judgment is that of holding conceptions together simultaneously, and in the case of inference that of a consequential arrangement of conceptions. It is convenient perhaps to speak of inference as a unity (or system) of judgments,

judgments as a unity of conceptions, just as we sometimes speak of conceptions as a unity of percepts. But this is only permissible if we keep in view that it is the same central unity of the individual mind which is operating in every case, and is realising itself in each case more fully as it becomes thus more fully conscious of the individuality of its object. The unity of the judgment is not effected by the conceptions coming of themselves together, or by letting loose some secret spring in the mind. Judgment is an active operation of the mind as much and in the same general sense as conception. And it is a greater expression of the unity of the mind because it is a unification of conceptions which are themselves forms of unity. Hence it is that the mind feels in judgment that it has a greater hold over the object, is more fully aware of its individuality as a distinct and independent being. The mind's own individuality is more fully and consciously realised in the act of judgment, and the conscious substantiation of its own being implies a corresponding substantiation of the object. So again in inference, the mind's unity is more fully expressed by a still more comprehensive operation of unity, it is conscious of its individuality more completely, and the individuality of the object has for the mind a greater meaning; it is a consciously systematic whole of content.*

The judgment, then, is not a mere development of the conception as such; it is a new distinctive act of the mind; nor is the inference a mere development of the judgment, but a new operation of the single individuality of the mind. The only development that is affected is that of the concrete

* The question whether conception precedes judgment or again whether judgment precedes inference must be carefully distinguished from the significance of each of these as mental operations. Which of them is prior in time depends largely on the state of an individual's knowledge. In actual experience a judgment may be summarised in a conception, just as an inference may be summarised in a judgment; and again a conception may be articulated into a judgment.

living individual mind. To speak of judgment developing into inference is either a figure of speech or the substantiation of a mere function. And the suggestion that with inference judgment passes away altogether in the process of knowledge, and "gives place" to something higher, is again inaccurate or a figure of speech. The inference only has actuality as an effectual operation of unifying judgments, which are thus no more dissolved in the process than the organisation of the organs of the body implies that the organism "cancels" the organs. In inference judgments subsist in the same way that in judgments conceptions subsist. In a word, conception, judgment and inference are qualitatively distinct acts of the individual mind required, each and all, to secure its end.

Judgment, which takes the form of the subject predicate relationship, is only possible after the stage of perception is passed. The subject is in general a relatively richer complex of content of the object grasped as a single unity; the predicate is a part of this same object at once consciously detached from and united to the subject. The mind grasps both in inseparable union, and in so doing consciously realises the meaning of the individuality of the object. The supposition that in some way the subject in judgment is outside the mind, and that the mind "applies," predicates to this subject is a confused misstatement of the actual situation, largely due to the mechanical interpretation of the relation of mind to object in knowledge. The subject in judgment is no less a part of the single process in which knowledge consists than the predicate. The object remains an independent real being through the whole process.* Knowledge is a mental operation pure and simple, the way in which the mind becomes conscious of the meaning of the object. The object as a real being has no more to do with our way of

* The treatment of subject and predicate in a judgment as in some way separate existences is probably due to a confusion of the subject-predicate relation in judgment with the subject-object relation in experience.

realising truth than it has to do with us making mistakes in the process ; truth and error are both mental, the one the result of fulfilling certain special laws of mentality, the other of failing to fulfil them. That the subject is only in general a richer complex than the predicate is seen in the fact that sometimes both subject and predicate have the same degree of complexity, and in that case it is a matter of indifference which is taken as subject and which as predicate. In other words, there is nothing in the nature of the judgment which compels us to take one conception as always and alone subject, and another as always and alone predicate. The stage of knowledge reached alone determines which is subject and which is predicate. In the imaginable limit, were we to know the whole universe, the relationships of predicate and subject would be completely reciprocal.*

* That inference is only found at the level of conceptual activity seems generally to have been admitted. That judgment should not have been confined to the same sphere of the knowing process is due in large measure to a misinterpretation of the relation of perception to conception. We find writers speaking of "judgments of perception" in the sense not simply that judgments deal with results of perceptual activity, but that perception is itself a judgment. Some even go so far as to speak of the "perceptual judgment" as the ultimate judgment of knowledge. But for the influence of language the phrase "judgment of perception" would be seen at once to be unmeaning. Perception as such requires no words at all ; it does not operate by the use of language, but through the physiological structure of the organisms, and is complete in its kind as a level of knowledge. We apprehend the things of sense about us by the exercise of our sense organs, and these need no other intervening agency to establish mental communion between the mind and its object. This can be seen on a great scale in listening to a piece of music or looking at a picture. Our apprehension can be complete : and speech seems even an intrusion or an irrelevance. Language is devised by the mind in the interests of conceptual activity alone, and not till it arises do we use it. But so does it distort the actual character of knowledge that when we apply language to objects which we can also apprehend by perception, we tend straightway to identify the linguistic embodiment of a conception with the object as apprehended by perception. Hence the term "judgments of perception." It is due to a confusion between the conceptual recasting of the individual object

VII.

The complex and detailed articulation of inference is required by the variety of ideas and conceptions which the mind evolves on its way to self-fulfilment. And inference more completely realises its sense of individuality than any of the other operations, and correspondingly the object assumes a definite individuality of meaning which is unattainable at an earlier stage. But the final operation of the mind in knowing is not inference, but a single concentration of the mind in which it grasps the individuality of its object as a single intelligible whole, without going through the detailed process of connecting its parts, and yet with all that detailed connection subsumed in the act of comprehension. This stage is intuition or mental vision, inseparable from feeling and carrying the sense of completed mental activity or free self-fulfilment. In this form the mind finds its highest satisfaction, certainty with coherence, unity of individuality and conscious union with the individuality of its object, in a word, complete conscious independence through interdependence of subject and object.

This is more readily attained in the mind's relation with a small range of objects than in relation to a larger, with some kinds of objects more than with others. And wherever it is attained then the aim of the knowing process has been reached

by the mind and the perceptual apprehension of the same object; and the confusion is effected by the application of language to perceived objects in the interests solely of conceptual activity. Hence it is supposed that when we say "this tree is green" we are dealing with the object both from the conceptual and from the perceptual point of view at once. But the statement "this tree is green" is not a deliverance of perception: it is a complex of ideas alone. The perception of the tree is not utterable in speech because it needs no utterance: it is direct knowledge, immediate communion of the mind with the object through the exercise of sense organs. That is why animals who equally perceive objects use no language and need none for their knowledge.

—in that it finds at once truth and self-realisation through the channel of knowledge. The goal of knowledge is not a system of thoughts outside the mind, but a state of mind. A system of knowledge itself only has being in and through the process of reacting or evolving it. The supposition that the aim of knowledge is to establish or find a system of thought holding it over independent of the mind, is due, as already said, to confusing the expression of knowledge in language with the realisation of knowledge as a mental process. The latter alone is the reality in the situation; the former is an artificially devised means for rendering permanent the results of actual knowledge. A system of knowledge means, strictly considered, a systematic way of knowing. To place the achievements of knowledge on record is not to put knowledge in some ideal realm beyond the mind. The embodiment of truth in a book is not the "objectification of truth"; we are mere victims of our own devices if we confused these two. Knowledge only subsists as a mode in which the mind is realised, and it is only realised as it actually grasps its object, for in so doing it finds itself real and finds the meaning of the reality of the object. An organism does not live in what it has done, but in the actual exercise of its vital energy. To the mind that knows, the world of objects is pervaded by new meaning, it becomes a new world sustaining the living individual by a new vision which is also a new emotion. A poet does not subsist in his written poetry, but in his poetical outlook on the world. A religious individual does not live by constantly recalling and reformulating his creed, but by actual communion with God. A moral agent does not estimate his moral achievement in terms of his past acts, most of which he has probably forgotten, but in the clearness of his actual insight into the moral situations of everyday and his readiness of accurate response to the demands of the hour. So in the attainment of knowledge. The "ideal," which alone is effective and significant, is the possession of a power of reflection and insight which enables the agent

to realise his place in relation to other beings, and to grasp their meaning by the free activity of his thought. This is to make knowledge "real," this is to know the "truth," this is to attain the concreteness of knowledge as a vital experience.

Hence the goal of knowledge is not a far off ideal, but a realised experience. The truth is not the whole of reality, but a conscious realisation of a whole individuality.