

I

METHOD

Methods are products of reflection. Successful performance is recalled in memory; each step in the process is distinguished; superfluous elements are eliminated; simpler ~~x~~ or more efficient procedures are worked out; and so gradually there is determined the method, the proper way, of getting something done.

Commonly enough the desired result is known ~~in~~ in advance, and then a method may be conceived as selecting the appropriate means to obtain an end. But this is not the general case. Scientific inquiry aims at coming to know what as yet is unknown. A scientific method, accordingly, directs operations to an unknown result, and so cannot be determined by reasoning from the end to the appropriate means.

It is true, of course, that the aim of contemporary science is the complete explanation of all phenomena. But complete explanation has not yet been obtained, nor is it expected within the foreseeable future. Moreover, though the words, phenomenon, explanation, complete, convey an intelligible meaning, it is a matter of some difficulty to define the meaning; it is not likely that everyone would accept any given set of definitions; and even were some set to be accepted, it is not impossible that future scientific developments should bring about their revision. The world ~~is~~ explained by relativity and quantum theory need be no more permanent than the world explained by Newton and Laplace.

This essential openness of science implies that scientific methods, at least in the first instance, are reached by trial and error. The inquirer fiddles with his materials; he tries this and that in a lifelong quest; eventually he hits upon a result. Results may accumulate for a long time before anyone reflects upon the performance that led to them, before

procedures are described and analysed, before key steps are discerned and placed in their proper order, before ~~early~~ analogy makes past success the highroad to success in the future. But once any method is discovered and made explicit, it holds the field until a ^b better method comes along.

~~But~~ ^Even at a second stage, when method itself is an object of reflection and study, the sheer process of trial and error retains its importance. For the ultimate refinements of method differ from one specialty to another. They are too subtle and diverse to be derived from general principles or even to be formulated with accuracy. They are the fruit of familiarity with one's corner of a field, and they are taught in laboratory or seminar more by example than by precept. But if in a book their existence must be acknowledged and their importance stressed, it remains that the book itself must treat of broader and more communicable matters.

The most conspicuous effect of sustained investigation and study is the division of labour. One man studies scripture, a second the Fathers, a third the mediaeval Scholastics, a fourth the doctrine of the contemporary church. Each soon finds that he has more on his hands than he can manage. Parkinson's law comes into operation repeatedly to divide and subdivide ^{once upon} fields and to multiply specialties and specialists. What ~~was~~ ^{at} a time was a single subject with an internal and almost organic unity, ~~dis~~^{dis}integrates into a multitudinous colony of cells each competing with the others for survival. Monographs, collective works, handbooks pour off the press. First courses and then departments multiply. Students begin voraciously upon the riches on display, move to bewilderment over their ^{un}related multiplicity, end ^{by} by ceasing to wonder ~~at~~ what it could all be about.

The contemporary task of method in theology is to breath life and form into this mass. At its disposal there are two related ideas: operational structure and operational specialization. What these ideas are and how they are related, I must now attempt to outline. Such an

outline, of course, can do no more than attempt to communicate the insights that are worked out and applied in subsequent chapters. It cannot possess the concreteness that makes understanding easy. But it does offer the clues that some readers will desire at once; its logical priority makes ^{the} ~~the~~ task of exposition and expression lighter; and readers who desire a different order quite rightly will begin with chapters whose aims seem less remote and arid.

1. Operational Structure.

On an overall view a method is an open pattern of recurrent and related operations. There are distinct operations; they are so related that one leads to another, and the set of relations forms a pattern; the pattern of related operations may be repeated indefinitely; but because the pattern is open, each repetition adds ^{can} to what was done before to give to method both its cumulative character and its asymptotic approach to its goal. Such is the meaning of operational structure, and now I must proceed, first, to illustrate ^{the notion} and, secondly, to ~~assign~~ ^{assign} ~~its~~ ^{its} ~~the~~ grounds of this notion.

In the natural sciences, then, method inculcates a spirit of inquiry, and inquiries recur. It insists on accurate observation and description: both observations and descriptions recur. It praises above all else discovery, and discoveries recur. It demands the formulation of discoveries in hypotheses, and hypotheses recur. It requires the deduction of the implications of ~~hypotheses~~ hypotheses, and deductions recur. It urges that experiments must be ~~devised~~ devised and performed to check the implications of hypotheses against ~~a~~ observable ~~a~~ fact, and such processes of experimentation recur. There are operations; they are ~~distinct~~ distinct; they recur.

They also are related. As expressed, such relations are objects in a conceptual field. But the prior reality that is objectified

by expression is the drive of intelligence in each of us, the desire to understand accurately and fully. It transforms experience into observation to pin down the observed by description. It is ~~that~~ the restlessness that heads us along one path after another in the hope that from mere description we may perchance pass to discovery. It prompts the scrutiny that formulates discovery in a hypothesis so exact in its meaning that by mere logic one can work back to its pre-suppositions and forward to its ~~imp~~ implications. It is not content with mere bright ~~and~~ ideas and their logical deployment. Hypothesis must fit every relevant fact, and so there begins the devising and performing of experiments that produce new data for ^{fresh inquiry and} new acts of observation and description. We are back where we started. The circular pattern of relations is complete.

Still the pattern is open. The process of experimentation brings to light data that may or may not square with the hypothesis. In so far as they do, they reveal that the investigation is not entirely on the wrong track. In so far as they do not, they lead to a modification of the hypothesis and, in the limit, to new discovery, new hypothesis, new deduction, and new experiments. The wheel of method not only turns but also rolls along. The field of observed data keeps broadening. New discoveries are added to old. New hypotheses and theories express not merely the new insights but also all that was valid in the old, to give to method its cumulative character and to engender the conviction that, however remote the goal of complete explanation may still be, at least we now are nearer to it than we were.

The foregoing sketch could be filled out in many ways, and it would be an easy matter to draw up an impressive list of further questions. But the reader must absolve ^{me} from doing so, since my purpose has been not to expound the method of natural science but to illustrate the notion of

an operational structure. For that purpose enough has been said, and now we must turn from the particular case to its origin and ground in the structure of human knowing itself.

As a method, so too human knowing is not some single operation but a pattern of operations. Each operation in the pattern is ^{both} intentional and conscious: intentional inasmuch as it constitutes awareness of an object; conscious inasmuch as it renders the subject aware of himself and his operation. But awareness, intentionality, and consciousness are not univocal terms. The awareness of intentionality makes the spectacle present to the spectator, the object to the subject. The awareness of consciousness makes the spectator and his looking present to himself. But though I have ~~red~~ repeated the word, present, as I have repeated the word, awareness, still there is a vast difference between the two instances. To be present to himself, the spectator does not have to become part of the spectacle. On the contrary, unless he is present to himself, nothing is present to him; and his presence to himself as subject is, never what is gazed upon, attended to, intended, and always resides in his gazing, attending, intending; so that he can be at once both totally present to himself and yet directing his whole attention to the object of his concern. Finally, while there exists the operation, called ~~and~~ introspection, this must not be confused with consciousness: we do not become conscious when we introspect; we must already be conscious to have anything to introspect; and so introspection is a matter of shifting attention away from objects to the subject and thereby making the subject, already present as subject by consciousness, also present as ^{the} object on which attention is directed.

There are further differences of intentionality and consciousness. In a dream state they are inchoate and commonly fragmentary and incoherent. When we awake, intentionality and ~~to~~ consciousness take on a different hue to expand on four successive and related levels. There is the empirical

level on which we sense, perceive, imagine, feel, ^{speak,} move. There is an intellectual level on which we inquire, come to understand, express what we have understood, work out the presuppositions and implications of our conceptual or verbal expression. There is the rational level on which we reflect, marshal the evidence, weigh the pro's and con's, pass judgement on the truth or falsity, certainty or probability, of a proposition. There is the responsible level on which we are concerned with ~~our~~ ourselves and our goals, ~~our~~ our own operations, deliberate about possible courses of action, evaluate them, decide, and carry out our decisions.

All the operations on these four levels are intentional and conscious. Still, intentionality and consciousness differ from level to level, and within each level the many operations involve further differences. Our consciousness takes on a new dimension when from mere experiencing we turn to the effort to understand what we have experienced. A third dimension of rationality emerges when the ^{content} ~~products~~ of understanding ^{is} ~~are~~ regarded as of ^{itself} ~~themselves~~ mere bright ideas and we endeavour to settle what ~~really is so~~. ~~A fourth dimension comes to the fore when judgements of fact yield place to deliberation on what we are to do about them~~ really is so. A fourth dimension comes to the fore when judgement on the facts is followed by deliberation on what we are to do about them.

New paragraph { On all four levels we are aware of ourselves, but, as we mount from level to level, it is a fuller self of which we are aware ^{and the awareness itself is different.} As empirically conscious, we do not seem to differ from the higher animals. But in us empirical consciousness and intentionality are only a substratum for further activities. The data of sense provoke inquiry, inquiry leads to understanding, understanding expresses itself in language. Without the data there would be nothing for us to inquire about and nothing to be understood. Yet what is ~~sought~~ sought by inquiry and reached by understanding is never a further datum but the idea or form, the intelligible unity or relatedness,

of data; and conversely the inquirer is not just a centre of experiencing but an intelligent centre, and aware of himself more actively by his intelligence than by his experiencing. Without our efforts to understand and their many and conflicting results, we would have no occasion to judge. But such occasions are recurrent, and then the intelligent centre of experiencing reveals his reflective and critical rationality. Once more there is a fuller self of which we become aware, and once more the awareness itself is different. As intelligent, the subject seeks insight and the revelation of his intelligence in his behaviour, his speech, his grasp of situations, his mastery of theoretic domains. But as reflectively and critically conscious, he incarnates detachment and disinterestedness, gives himself over to criteria of truth and certitude, makes his sole concern the determination of what is or is not so; and now, as the self, so also the awareness of self resides in that incarnation, that self-surrender, that single-minded concern for truth. There is a still further dimension to being human, and there we emerge as persons, meet one another in a common ^{concern} ~~concern~~ for values, seek to abolish the organization of human living on the basis of competing egoisms and to replace it by an organization on the basis of man's perceptiveness and intelligence, his reasonableness and his responsible ^{exercise} ~~exercise~~ of freedom.

Corresponding to such differences in consciousness there ~~are~~ are differences in intentionality. Heavy and light, hot and cold, are objects of experience; but mass and temperature are not experienced but only thought and affirmed. As the conscious subject is not a homogeneous point but an identity in many differences, so too the word, object, has many meanings corresponding to many intentionalities and, as well, an overarching meaning that fuses the many into a compounded unity. It is one thing to experience weight and another to ~~think~~ think of mass; and what is experienced is not an object in the manner ^{same} ~~and-sense~~ as an object of thought. Still

what is experienced as heavy also is what is thought to have mass, and indeed just so much, with neither more, else it would be heavier, nor less, else it would be lighter. The object of experience, ^{as felt,} ~~with~~ weight, is not the object of thought, mass; yet one and the same feels heavy because of its mass; and this 'one and the same,' this identity, is a third object, the known unknown that is intended by inquiry about weight and still ~~not~~ intended, though not exhaustively explored, when the question ~~is~~ set by inquiry is answered by the concept, definition, and name of mass. But that answer is incomplete. It is incomplete incidentally, for it happens that mass without acceleration does not suffice to account for the experience of weight. But it also is incomplete essentially, for it gives us no more than the thought, the concept, the name, the hypothesis, ~~and~~ the theory of mass. An experience of weight is not accounted for by our mere ~~thing~~ ^{or talking} thinking about mass. Unless the mass is real, it will not really account for the experience. But such reflection reveals that the subject has shifted ~~to~~ from intellectual to rational consciousness. The shift manifests itself in a further question of a ~~type~~ different type, Is it really mass that accounts for the experience of weight? Inquiry no longer heads for objects of thought but for real objects, for what is so. Still, just as the same subject is promoted by the new ~~is~~ question from intellectual to rational consciousness, so too it is the same intending that by a true judgement promotes the object of thought to an ~~acknowledgement~~ acknowledged real object. And in similar fashion, the promotion of the subject from critical rationality to responsible freedom raises about real objects the question of their value or utility; and the consequent ^{at once} judgement invites and challenges the subject to commitment and decision.

~~To know something and to act upon one's knowledge does not put an end to questions. Questions keep recurring. As the subject develops in experience, in intelligence, in judgement, in decision, his growth is but the subjective pole that is correlative to a field, a world, that is~~

So much for a sketch of the general pattern or structure of our conscious and intentional operations. It is only a sketch and some readers, no doubt, will desire the addition of further details. But more commonly, perhaps, questions will be raised about the sketch itself. How does one arrive at an account of this kind? Can any such account claim to be definitive? What would be the use of a definitive account?

First, then, one arrives at such an account and, similarly, one will arrive at its endless details, by applying the pattern of operations as intentional to the operations as conscious. Our first question, ~~accordingly, can be answered only in a series of steps. Are there conscious operations? Is the pattern itself also conscious?~~

accordingly, can be answered only in a series of steps. There are required the materials on which one is to operate, and so we must ask whether there are conscious operations and whether their pattern is itself conscious. There are required the operations on the materials: what is given in consciousness is on the side of the subject, and so it must be objectified by introspection; what is objectified by introspection has to be described and understood; what is understood, has to be expressed if an account is to be reached. Let us consider these points successively.

There are conscious operations. No doubt, this statement will be challenged, but the challenge will be indirect. It will be urged that it is a mistake to begin from consciousness, because consciousness is not public but private. It will be contended that science proceeds by measurement or that philosophy begins by discussing the language employed. But ~~any such challenge is easily turned.~~ Do you consciously say it is a mistake to begin by consciousness, or are you ^{then} unconscious? ~~or unconsciously?~~ Do you measure consciously, ~~or are you unconscious then?~~ Is discussion of language conscious, or is it carried on in a state of dreamless sleep? On the other hand, the direct challenge will not occur. No one, unless his

no one will
claim that
he is unconscious
when he says!

organs are deficient, is going to say that never in his life did he have the experience of seeing or hearing, of smelling, touching, tasting, of imagining or perceiving, of feeling or moving. No one will preface his lectures by repeating his long-standing conviction that never in his life did he have the experience of intellectual curiosity, of inquiring, of striving and coming to understand, of expressing what he had grasped by understanding. No one will begin his contributions to periodical literature by reminding his readers that never in his life did he experience anything that might be called critical ~~reflecting~~ reflection, that he never ~~paused~~ ~~paud~~ paused in doubt about the truth or falsity of any statement, that if ever he exercised his rationality by passing judgement strictly in accord with the evidence, then he did so quite unconsciously. ~~No will~~ No one is going to place at the beginning of his books the warning that he has no notion of what might be meant by responsibility and that never in his whole life did he have the experience of acting responsibly, least of all in composing the work he now is offering to the public.

~~As conscious operations exist, so too their pattern is conscious.~~
~~Indeed, consciousness is so much of a unity, apart from cases of schizophrenia~~
~~and multiple personality,~~

As conscious operations exist, so too their pattern is conscious. We do not experience the operations in isolation and then, by a process of inquiry and discovery, arrive at the relations that link them together. On the contrary, the unity of consciousness is itself given; the ~~pat~~ pattern of the operations is part of the experience of the operations; and inquiry and discovery are needed, not to effect the ~~syn~~ synthesis of an unrelated manifold, but to analyse a functional and functioning unity. Without analysis, of course, we cannot discern and distinguish the several operations; and until the operations have been distinguished, we cannot formulate the relations between them. But the point to the statement that

the pattern ~~itself~~ is conscious is that, once the relations are formulated, they are not found to express surprising novelties, but prove to be mere objectifications of the routines of our conscious living. Before reflection brings the pattern to light, before the methodologist issues his precepts, the pattern is ~~it~~ already conscious and operative. Spontaneously we move from experiencing to the effort to understand; and the spontaneity is not blind; on the contrary it is constitutive of our ^{conscious} intelligence, just as the absence of the effort to understand is constitutive of stupidity. Spontaneously we move from understanding and its manifold and conflicting fruits to critical reflection; again, the spontaneity is not blind; it is constitutive of our conscious rationality just as the absence of critical reflection is what we mean by silliness. Spontaneously we move from judgements of fact and possibility to judgements of value and to the deliberateness of decision and commitment; and that spontaneity is not blind; it constitutes us ^{as conscientious,} as responsible persons, and ^{manners} its absence would leave us psychopaths. In various detailed ~~accounts~~ method will bid us be perceptive, be intelligent, be reasonable, be responsible; the details of ^{its} ~~his~~ prescriptions will be derived from the character of the work in hand and will vary with it; but the normative force of ^{its} ~~his~~ imperatives resides, not in ^{its claims to} ~~his~~ authority, not in the probability that ~~success in the~~ past what succeeded in the past will succeed in the future, but in the natural spontaneities and inevitabilities of our consciousness which ^{constitutive} assembles its own parts and unites them in a rounded whole in a manner that we cannot avoid without, as it were, amputating our own moral personality, our own reasonableness, our own intelligence, our own sensitivity.

~~Conscious operations exist, and their pattern is itself conscious. There are then the materials to which the pattern of operations as intentional may be applied. But it only through the application that one can move from a conscious pattern of conscious operations to an account that objectifies them. The same operations are both conscious and intentional, and so it is the same pattern that unites the operations as conscious and the operations~~

, then,

Consciously we operate and consciously we proceed from one conscious operation to another. What is conscious, is given. But what is given to consciousness differs greatly from ~~xxx~~ what is given to senses. ^Tthe latter is object: it is the shape or colour that is seen, the sound that ^{or liquid} is heard, the odour that is smelt, the solid ^A that is touched, the morsel that is tasted. But what is given to consciousness, never is object; it is on the side not of the spectacle but of the spectator, not of the thought but of the thinker, not of the judgement but of the judge, not of the beloved but of the lover. ^{If one is to} ~~we~~ proceed from what is given ⁱⁿ to consciousness and to arrive at an ^c account of what is given, one must objectify; one must construct an object on the model of the subject; one must pass from operations as consciously performed to operations as introspected, as intelligently thought, as reasonably affirmed. In brief, one has to apply ^{pattern of} the operations as intentional to the operations as given ~~in~~ consciousness.

The first step is introspection. It is the shift by which we somehow slip from the colours we see to ~~xxx~~ our experience of seeing, from the connections we understand ~~but~~ to the experience of understanding, from the evidence by which we judge to the critical rationality of our judging, from motives and objects of choice to the responsible deliberateness with which we choose. Essentially such introspection consists in a shift of attention: from attending to ~~object~~ objects we turn to attending to the operations with respect to objects. ~~But in concrete practice introspection goes hand in hand with descriptive analysis that discerns, distinguishes, names, relates, infers, checks, revises.~~ ^{inquires, discovers,} But this essence of introspection ^{and recurs} is not achieved by itself. It occurs ^A within the unfolding of a method, of a particular variant on the general pattern of our intentional operations. To introspect one must evoke in oneself the ^{appropriate} state and produce the operation ~~immediation~~ under investigation: otherwise one has nothing to objectify. ~~If this preliminary is easily fulfilled by producing sensations and images,~~

If this preliminary is ~~more~~ easily fulfilled when one is asking what it is to see or hear or imagine, not a little ~~ingenuity is needed~~ forethought and ingenuity are needed when one is asking about symbols, inquiry, insight, definition, thought, critical reflection, weighing the evidence, judging, evaluating, deliberating, deciding. One's state and operation must be genuine. One must be content to begin, not from what is more interesting, but from what is simpler and ~~more~~ more precise. One has to be as much concerned with relations between operations as with the operations themselves. One must not expect merely to introspect, for introspection occurs within a context of inquiry, discernment, distinguishing, identifying, naming. Above all, one must not hope to introspect vicariously. One has to do it all the talk for oneself. Otherwise one will never really know what ~~the talk~~ is about. Just as the man born blind knows colour, not by seeing it, but by some inadequate analogy with which his misfortune forces him to be content, so too a reader that does not introspect to discover and identify within himself the conscious pattern of his conscious operations will get no further than some vague association between his personal experience and the terms and relations employed to refer to it. He will not properly pierce the veil of language and attain the ~~familiarity~~ familiarity that enables him to pin down exactly the conscious event or process that is meant. At most, he can employ some elegant and ~~and~~ exquisite manner of discussion and clarification that prepares indeed the way and lights the path of introspection but never opens the door, enters, and thereby passes beyond talk to what is talked about.

Introspection objectifies not only conscious operations but also conscious processes. There is, accordingly, something quite exceptional about an inquiry into the nature of our own minds. Sensitive perception does not reveal intelligible relations; as Hume might put it, ~~perception~~ we perceive not causality but succession. In similar fashion, introspection,