METHODOLOGY IN PSYCHOLOGICAL MEDICINE.*

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THE development of psychological medicine in Great Britain has been accompanied by a certain feeling of inferiority amongst psychiatrists and psychotherapists. This has shown itself in rivalry, at times brisk and even acrimonious, which may be understood as a striving to obtain the object which another is thought to be pursuing. This state of affairs arises when there is uncertainty of objective; and all will agree that the objectives have been ill-defined and at times nebulous. Here as elsewhere the familiar characteristic has been "muddling along somehow". When we come to consider possible reasons for this, one feature stands out, namely, the lack of originality in our insular school of thought. We have produced no Copernicus to revolutionize our methods and systems, and so sweep away intellectual vested interests. To meet the needs at home we have built up a national debt by borrowing. Our source of inspiration has been largely Continental. Freud, a little bitterly perhaps, alludes to "the numerous psychiatrists and psychotherapists who warm their pot of soup at our fire—without indeed being very grateful for our hospitality" (1). The genius of Freud and of Jung lay in speaking from the heart and setting at naught traditional views. Their very different contributions have been so refreshing that many accepted, without questioning, the teaching of one or other of these pioneers. Others rejected *in toto* (and often unread) what was described as "the new psychology". But a more hopeful note has recently been sounded in this country; for the question of method, or way by which we proceed to the attainment of some aim, has been the subject of numerous contributions; and less attention is being paid to the technique embodied in the method. In this paper certain suggestions upon methodology will be made; and the subject will be examined critically, especially from the clinical aspect.

I.

We are one and all influenced by education, experience and inborn tendencies, consequently we do not fix our attention upon the same objects. One will note the behaviour of a patient, another his physique, and a third the working of his

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mind. These three interests, and many others, could have been co-ordinated. But no union was attempted. On the contrary opposing factions claimed a monopoly of wisdom. The expansion of psychological medicine has, therefore, been haphazard and unmethodical. Further, developments in this branch of medicine arose out of the necessities and upheavals of our own time and so bear the signs of unrest. The absence of an accepted plan of campaign resulted in considerable waste of energy. The realization of this has led to a praiseworthy attempt to bring the results of clinical observation in psychological medicine into line with advance in scientific knowledge elsewhere. The scientific method has been familiar to scientists for generations, and its use has resulted in a vast increase of knowledge. Experimental psychology advanced in the sixties and seventies of last century by the use of scientific procedures. It was reasonable to believe, as Charcot and others did, that a like success would follow in psychological medicine if scientific principles were applied to it. Indeed such an attitude seemed almost a matter of common sense in clinical psychiatry which was then so ill-charted. Freud, loyal to his early scientific training, accepted nothing which he did not verify by repeated observation. His findings were often a surprise to him. But he turned aside from nothing which he believed to bear the mark of truth. His originality, both in the handling of clinical material and in the terminology he introduced, led some to suppose that he stood in complete detachment from his age. Some support for this view was forthcoming from Freud himself. In 1928 he wrote : " I ask you to bear in mind that our specific science is still very young—hardly as old as our century, as a matter of fact " (2). Yet in its method the new science, which had been built up through continuous contact with observations (*ibid.*, p. 46), was as old as rationalistic humanism ; and it was particularly indebted to the form which this took in the nineteenth century. The method employed from beginning to end was the scientific method. The patient and relentless use of this method in the study of endopsychic processes was never abandoned by Freud, even in his speculative works (*ibid.*, p. 294).

Before his time psychiatrists had not brought the modern scientific outlook to bear upon their clinical material. They had, it is true, utilized the results obtained in the physical sciences in the investigation and treatment of mental sickness. But Freud, believing that the human mind was a part of nature rather than an entity outside nature, accepted the hypothesis that nature was a rational whole ; and he proceeded, in consequence, to study the mind itself in a scientific fashion. This would seem to have been claimed as a new method by some psycho-analysts. Thus Rickman writes : "The tendency of psychiatry up to the present time has been to turn for help to the methods of the physical sciences which resolve themselves to number, measure and scales. . . . Psycho-analysis now had to offer another method, which does not enumerate, measure or weigh ; it deals with presentations in the mind and tries to find by its technique how they are *arranged* ; how they *interact*, and how they take *effect* in

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human behaviour" (3). The method thus described by Rickman as "another method" is not in fact a new method at all. What is new is the application of the method in a fresh field. Freud himself was quite content with the method of science. "The contribution of psycho-analysis to science consists precisely in having extended research to the region of the mind. Certainly without such a psychology science would be very incomplete. But if we add to science the investigation of the intellectual and emotional functions of man (and animals), we find that nothing has been altered as regards the general position of science, that there are no new sources of knowledge or methods of research" (4).

The emphasis upon method as such has stimulated interest and even enthusiasm in almost every branch of psychological medicine. The scientific method, so it is believed, is intelligible and free from any suspicion of mysticism or animism. However this may be, this method has come to be accepted almost as an article of faith by some noted psychiatrists of our own day. Mapother, for example, writes: "It may well be questioned whether there is any alternative method if we distinguish belief from knowledge and unless we grant the power of revelation or intuition to provide knowledge as opposed to belief"(5). A further instance is given by Hart: "The main psychological attack upon psychiatry has adhered wholeheartedly to the method of science, and has claimed therein its entire justification" (6). Hart wisely adds that "the method of science is not an unique, absolute and unimpeachable key to knowledge . . . but only a convenient and most efficient weapon". Nevertheless, his view is that so far as we have gone the scientific method stands supreme.

This canonization of the scientific method would seem to have been inspired by Pearson. He permitted no hesitancy in applying the method wholesale. "It (science) claims that the whole range of phenonema, mental as well as physical—the entire universe—is its field. It asserts that the scientific method is the sole gateway to the whole region of knowledge" (7).

The scientific method for which such far-reaching claims have been made is extremely simple. It does nothing more than define a plan which is to be followed in the pursuit of knowledge. "The unity of all science consists alone in its method, not in its material" (*ibid.*, p. 12). The essentials of this method may be briefly stated. Its primary tool is the objective observation of phenomena. Then comes the classification of the phenomena and lastly the deriving of mutual relations and sequences between the observed data, thereby making it possible to predict future occurrences which, in turn, must be tested by observation and experiment.

Formulations mixed with subjective factors have no right to be labelled "scientific"; and any system of thought and action which embodies subjective features departs from the principle of the scientific method and employs a method other than the scientific method. Likewise medieval science, which rested upon accepted belief based upon the authority of the Scriptures or of Aristotle, used a method different from the scientific method. Medieval science employed a

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dialectical rather than an investigatory method. The consequences of truth already known were its interest rather than new truths (8).

We have then, on the one hand, subjectivity, the mark of those who prefer opinion before knowledge, as it is thought, and on the other the authoritative or dictatorial procedure characteristic of medieval science and, perhaps, of some more recent statements. The adherents to the scientific method set out to steer a new course avoiding these two extremes.

A third group has also arisen, namely, those who claim to be "scientific" in the modern sense but are nothing of the sort. Examples are familiar and all too numerous, but one may be given from a recent work by Gutheil, *The Language of the Dream*: "The scientific material we make use of in our dream research is derived from observation and experiment. . . . We cannot observe dreams in a direct way, but we have a valid substitute for that, namely, recollection" (9). The amassing and systematic arrangement of facts, it should be remembered, is no guarantee that the material is being treated scientifically even though the label "science" be affixed.

In the same category we may place those psychiatrists who correlate states of mind with the supposed functioning of the central nervous system. Of them Golla remarks: "Basing their contentions on superficial resemblances between certain aspects of psychological phenomena and neural processes, we find them attempting to express psychology in terms of neuronic function. It is difficult for anyone with any intimate knowledge of neurophysiology to regard with tolerance attempts to find analogies between the activity of the isolated neurons and mental processes" (10).

Possibly it is owing to the use Bishop Butler made of the word "analogy" that the argument by analogy has been so popular. The value of analogy by way of illustration and comparison is great; and often a striking analogy has led to fruitful investigation. But it is a mistake, and one often made by psychiatrists and psychotherapists, to think that analogy, in itself, can *prove* anything. We would not be justified, for example, in concluding because of certain vocal similarities that the motivation, if any, in the mental life of the parrot is the same as that of its owner.

The scientific method marks a clear path and so avoids the wanderings of the pre-scientific era. But it is a method with limitations. A great deal of life is outside its terms of reference. The contention put forward here is that we must be prepared to drop this method where it is inappropriate; and we must be prepared to drop it even if we have not got an entirely satisfactory alternative method.

II.

The scientific method has drawbacks which render it an inadequate method in certain departments of psychological medicine. Observation, its primary tool, is not always free from the taint of subjectivity. The

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ideal may be "strictly objective observation" (Mapother, *loc. cit.*). Yet "to observe is not so simple as it seems. Often the observation, on closer inspection, proves to be a series of observations connected by inferences of a subjective nature. This fallacy may be overcome where mechanical recording of observations is practicable. But these cannot always be used. They would be impossible, for instance, in psychotherapeutic practice, for here the observer would require to observe himself in the act of observing. His introspection would, in fact, be retrospection. Also when we observe a patient, he is continuously affected by it; and in consequence the repetition of the observation for purposes of verification becomes impossible" (11).

Moreover, observation has links in memory with the past—what we see or feel is automatically associated with what we have seen and felt. In practice, also, it is almost impossible to prevent the blending of observation and interpretation. The mind works as a whole; and observation cannot be carried out in detachment from other mental activities.

MacCurdy, writing upon psychopathology and social psychology, remarks that "if experiments are opportunities for observation where the majority of the factors are under control, we can say that there is in studying the production of abnormal mental reaction only one truly experimental method, namely, that of hypnotism and suggestion" (12). This reference is made to emphasize still more the limitations of observation.

The only observations of value in science are those which are free from the individual bias of the observer and which could in consequence be made by any other observer. Observations of this order could never be made in psychotherapeutic practice unless we had impersonal and, so-called, objective therapists, the prototype of which would be the skilled mechanic.

The circumstances under which observations are made—and under which alone they can be made so far as the bulk of clinical work goes—limit the value of such observations in the eyes of scientists. Psychotherapy cannot be conducted in public or in a laboratory. Mapother (*loc. cit.*), and others, hold that the observational methods of psycho-analysis have "warped its findings . . . and seem unfitted to provide evidence that is valid for science. "Psycho-analysis", he declares, "is fatally handicapped by its privacy which renders verification by the sceptical impossible". The same argument might well be advanced against other psychotherapeutic procedures. It would, however, be a mistake to conclude that psychotherapy must therefore be abandoned. The obvious answer to such criticism is that the scientific method is not and never has been suited to material of this kind. But apart from observation there is a still greater difficulty in using the scientific method. Unfortunately the critical discrimination of various workers in this field has not led to agreement upon the question of the facts alleged to be observed. Plato, it may be recalled, drew a distinction between lovers of opinion and lovers of knowledge. Protagonists of one school of thought insist that to them alone belongs knowledge

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(i.e., the facts) while their benighted critics are mere lovers of opinion. Since no agreement has been reached upon a criterion of the facts, of the data, an indispensable feature of the scientific method is absent.

Gillespie in a paper entitled " Is there a Science of Psychology ? " refers to this : " We find a lack of agreement as to what the subject matter is to be. It is not a question primarily of heterogeneousness or vagueness of data ; but a question first of all as to what the data are, and before even that how the data are to be looked for. . . . When neither the data nor the methods for proving them are agreed upon, you cannot expect to find that comprehensive results will be observed in the form of laws obtained by deduction from the data" (13).

Despite criticisms of this kind a very important group of psychotherapists —the psycho-analysts—believe that psycho-analysis (using the word to denote a certain body of knowledge and the method used in amassing it as well as a psychotherapeutic technique) does possess the standing of a science. Reference has already been made to Hart's advocacy of this claim. Since the publication of Hart's presidential address to the Psychiatric Section of the Royal Society of Medicine, Otto Fenichel, in a book which has behind it the authority of the editors of *The Psycho-analytic Quarterly*, claims that "the theory of the neuroses put forward in psycho-analysis furnishes the scientific foundation for further practical work" (14). Psycho-analysis in this work (translator's preface) is described as a living scientific discipline that has not yet become dogmatized.

The word "dogma" has several meanings : it may be that which is held as an opinion, or else a body of opinion formulated and authoritatively stated. It is difficult to understand what can be meant by " a living scientific discipline that has not yet become dogmatized " when the claim is also made that " psycho-analysis furnishes the scientific foundation for further practical work ". Fenichel, despite these statements, appears (very wisely it would seem) to take up a somewhat non-committal attitude. This is not stated in so many words but is implied in what he says. He admits that " the striving for ' regularity ' permits a formulation only of that which is of general significance, and so does violence in a sense to the uniqueness of the individual case ". And again : " In spite of the progress made by the theory of the neuroses, the genetic method of procedure in each individual psycho-analysis and the difficulties it entails underwent no changes." He continues : " One has the general feeling that actual cases and theoretical description of disease entities becomes less and less congruous as we proceed from somatic to mental diseases. That in neuroses the ' typical ' clinical picture is highly coloured by atypical features is proven by the fact that there is no unanimity among clinicians with regard to the systematization and nomenclature of the specific forms of neuroses."

Here indeed is a perfectly straightforward recognition of the difficulties : actual cases and theoretical description become less and less congruous, i.e., less and less coherent, less consistent and less harmonious ; and if, in addition,

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there is a lack of unanimity amongst psycho-analysts themselves with regard to the systematization and nomenclature, then it is indeed hard to understand why Fenichel and other psycho-analysts still claim that their body of knowledge is a scientific discipline.

Another criticism of the position adopted by Fenichel and, no doubt, by other psycho-analysts, is that a generalization arrived at inductively by " the genetic method of procedure in each individual psycho-analysis " which " does violence in a sense to the uniqueness of the individual case " would seem to be an unsatisfactory method. Unless justice be done to the individual cases it would seem unlikely that they could ever be unified into a connected system. The striving for " regularity " may be personally satisfying, and most people would agree that it would be an advantage if the regularity could be established. But so far as our knowledge goes we have not yet reached this stage.

C. S. Lewis, writing with facetious irony on the inductive method, wrongly applied, by the mouth of Mr. Enlightenment, says: " Hypothesis, my dear young friend, establishes itself by a cumulative process; or, to use popular language, if you make the same guess often enough it ceases to be a guess and becomes Scientific Fact " (15).

A distinction must be drawn between method and methods. *Method* is the general plan and *methods* are the technical or other procedures used in dealing with certain phenomena. Methods must vary according to the material to be investigated, and every worker uses the methods which have proved useful in reaching the end he has in view. The methods, or to be more exact, the technical methods are, as Wolf points out, " aids either to observation or to inference. Sometimes they render possible the observation and measurement of certain phenomena which either could not be observed and measured at all otherwise, or could not be observed so well and measured so accurately . . . the technical methods are, for the most part, different from one science to another, whereas the logical methods are more or less common to all sciences "(16). The genetic or evolutionary method is well known as one of the logical methods used in science, and it is usefully employed in the effort to trace relationships between groups of phenomena, similar customs, similar trends of mind and so on. It might be used in psychological medicine in order to establish the general significance of certain facts thought to possess a lowest common factor. This is the sense in which it has been used by Jung. The factor common to all, in his psychological system, is the collective unconscious. Jung, as is well known, makes no claim to be " scientific "—the reverse indeed is the case. If we may take Fenichel as representative of the school of psycho-analysis, which does claim to be scientific, then we cannot but regret that their use of scientific method —and, in particular, the genetic method (for this is specified by Fenichel)—has not as yet succeeded in establishing data which are acceptable even to clinicians practising psycho-analysis.

These criticisms of the employment of the scientific method do not, of course,

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apply to its use in certain branches of psychological medicine such as pathological and biological investigation and research. There it is the method of choice. In these and allied departments it has borne and will continue to bear an abundant harvest. But we pass the limits of its suitability and must seek another method when as individuals we deal with individuals who, like ourselves, inhabit a world in which purpose and personal values are of extreme importance.

The exclusive use of the scientific method in psychological medicine is surely a remnant of the atomist psychology of bygone days. " Those psychologists," says Aveling, " who are not so ' departmentalized ' as to exclude consideration of the deeper problems of their science, are coming to realize that analysis, though a useful and even necessary method, breaks up in thought what is in fact indivisible. The conception of consciousness as a mosaic of sensations, or products of mental chemistry, has been abandoned. . . . Polemic has been waged fiercely against the theory of faculties (intellect, memory, imagination, etc.) as unitary functions, until definite experimental evidence has been adduced that no such functions exist " (17).

III.

What has been said would seem to yield the conclusion that the form of the scientific method known as the genetic or evolutionary method, which held out expectation of being useful in defining data on which general agreement might be reached, has not justified the expectations formed of it. For the present, then, it would seem wise to resign ouselves to the conclusion that the scientific method, as such, is not suited to the greater part of the material with which we work. The human is not necessarily opposed to the scientific interest. But opposition becomes marked if the latter be regarded as more worthy of attention than the former. A map of the supposed, but as yet conceptual, stages in the evolution of a human being is of little importance if it fails to guide us in our dealings with human beings; and psychological medicine is first and foremost concerned with human beings.

We need not be too much concerned about consistency in our method. A consistency in method which obscures the material is foolish, and as such is " the hobgoblin of little minds " (Emerson). Remembering this, my positive suggestion to the problem of method (previously reported, loc. cit., and now repeated) is that we should, for the present at all events, utilize what I have described as the individualistic method. This, of course, refers only to that part of the field where we must as individuals deal with individuals. This method, by stressing the individuality of the therapist and of the patient, utilizes the subjective characteristics of both, for these are of importance. Inevitably it lacks the codification of the text-book. It differs radically from the method employed in science and in certain branches of medicine where the subjective characteristics of the therapist and of the patient have not (in theory

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at all events) been considered as important. The patient exhibits general characteristics, common to the human family, and they cannot be cited as an example of his difference from other men or as individual peculiarities. When these are found in the course of clinical work or noted in dreams reported to us they should be closely studied. Characteristics of this impersonal or general type may lead to the formulation of "laws". Unless we begin with a due regard for individual features we have small chance of discovering general features. Until we know what we are, we cannot pass to that which is beyond our individual differences. It is necessary for the patient to become aware of and to accept his individual differences so that he ceases to be limited by them. When, for example, the patient has come to regard his own problem as part of the problem of the age in which he lives, he has gained an appreciation of a more general attitude. The adoption of the general attitude does not mean the loss of individuality, but rather its enrichment, for individuality has now been correctly focused. The psychoneurotic, having resolved his conflicts and tensions, has at his disposal the energy hitherto manifested in his symptoms; and further his understanding of himself and of the forces operating through him engenders an objectivity in outlook previously unknown. Such persons do not continue in a state of insulation. Thus, while individualism (that is, the use of the individualisitic method) is an end, it is preliminary to other ends; just as education by fulfilling its function leads to that which was not part of the immediate educational aim.

A further advantage to patient and to doctor in this method is that it involves a proper appreciation of the spoken word. The psychotherapist must speak; and he should, it is maintained, thereby reveal himself as an individual (as he expects his patient to do) rather than laboriously conceal his personality. The words which pass between doctor and patient in the consulting-room inevitably possess a subjective coloration. The dictaphone has been used to secure a record of each word spoken by the patient and by the therapist during the course of an analysis. Perhaps its use was governed by the desire to be "scientific" But can we believe that the repetition of such a record would communicate the essential vigour and living accompaniment of the spoken word?

The individualistic method presents difficulties in practice, particularly in the reciprocal relationship inherent in it. But this is not a good reason for abandoning it in favour of another method which is unsuitable in such practice. The individualistic method is not commended merely on account of its results, but because of its suitability. Before we can judge a method by its results alone we must show that the results are true for all time.

Clinical experience in psychological medicine reveals many situations which lie beyond the limitations imposed by the rigorous use of the scientific method. A psychotherapist using the individualistic approach must, therefore, be prepared to recognize that he is using a method which makes no pretence to be scientific.

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No method is final—be it the scientific or the individualistic. Wisdom lies in the recognition that one is, or should be, supplementary to the other. Variation in outlook amongst clinical workers in psychological medicine is conditioned by the difference in material. Likewise it is conditioned much by the recognized and more by the unrecognized (that is the unconscious) qualities of the mind of each worker. However great the appeal of a monistic methodology may be, it must be resisted in the interest of clinical reality. The appreciation of individual features in method implies a new humanism in medicine; and with it a revaluation of medical education in which psychiatry and psychotherapy will receive due honour.

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