

# AN INTRODUCTION TO PSYCHOPATHOLOGY

BY

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### PREFACE

My hope is that this book will be of service to two classes of reader especially; firstly, to those who, professionally concerned in one way or another with mental illness, are looking for psychological explanations of their clinical problems and, secondly, to those who, carrying out research in the psychological laboratory, want so to extend their work that its results find clinical applications. My purpose is thus to build a bridge between the psychiatric clinic and the psychological laboratory. Whatever doubts I may have about the soundness of the structure which I provide, I am convinced that bridges of this kind are required, to encourage the interchange of views and to enable workers to pass easily, in either direction, from one side to the other. I have taken upon myself this task because I believe that by far the most promising line of advance in psychiatry at the present time lies in the application of psychological knowledge; yet for many years I have been uncomfortably aware of the difficulties.

Psychiatrists have had, as a general rule, little time or opportunity during their training to work in a pyschological laboratory and to gain an understanding of psychological methods. Indeed, they tend to have little sympathy for the elaborate experimental designs which are now fashionable, for these are very different from the ones with which they have become familiar in the physiological, biochemical or pathological laboratory. Psychologists, on the other hand, have, as a general rule, little knowledge of the specialized problems met with in the psychiatric clinic. Both have been largely denied, therefore, the great benefits which would come from cooperation, for successful co-operation requires mutual understanding.

I have been more fortunate. Early in my career as a psychiatrist I felt handicapped by a serious deficiency in my training and, thinking that this deficiency could best be remedied by working for a while in a psychological laboratory, I seized an opportunity to work under the direction of Professor Sir Frederic Bartlett in Cambridge. There I became a member of

a lively group of psychologists actively engaged in research and with wide and varied interests. I came also under the influence of the late Dr. J. T. MacCurdy, to whose advice, encouragement and, let it be said, provocation I owe a great deal. The war and other circumstances caused me to stay much longer than I had originally intended, and it was not until 1948 that I resumed practice as a psychiatrist. I was able to do so then without weakening any of my links with psychology, for in the same year I succeeded Dr. MacCurdy as Lecturer in Psychopathology, and took on the responsibility of teaching psychopathology to students reading psychology for the Tripos.

My lectures in this course form the core of this book, but I have expanded and revised them in order to meet the needs of a wider public. Their scope, as I have envisaged it, has been the discussion of the manifestations of mental illness in the context of psychological theories. I have not tried to make them comprehensive. In discussing matters on which there is controversy I have given as much weight to my personal views as to prevailing opinions, and I have thought it proper to do so, for I have been lucky to teach students who cherish the right to make up their own minds. I have done my best to be fair to those with whom I disagree.

Many in the Cambridge Psychological Laboratory have given me generous help, but I wish to record here my special gratitude to Professor Sir Frederic Bartlett, under whose direction I worked for more than ten years, and his successor, Professor O. L. Zangwill. In the preparation of this book I have had particular help from Dr. Norma Kent and Dr. J. Cullen.

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D. R. D.

### CONTENTS

	PREFACE	v
	PARTI	
I	GENERAL INTRODUCTION	I
11	PSYCHOANALYSIS	23
111	INHERITED AND PHYSICAL FACTORS IN AETIOLOGY	42
IV	ECOLOGICAL STUDIES	52
v	THE FAMILIES OF PATIENTS: GENETICAL STUDIES	64
VI	THE FAMILIES OF PATIENTS: FAMILY ENVIRONMENTS	96
VII	MENTAL DEVELOPMENT: INTELLECTUAL FUNCTIONS	120
VIII	FURTHER ASPECTS OF MENTAL DEVELOP- MENT	141
IX	DISORDERS OF MENTAL DEVELOPMENT	186
	PART II	
$\mathbf{x}$	EXPERIMENTAL NEUROSIS	216
ХI	SOME APPLICATIONS OF BEHAVIOUR THEORIES	229
XII	DISORDERS OF MENTAL FUNCTIONS	277
III	DISORDERS RESULTING FROM BRAIN LESIONS	319
XIV	METHODS OF PSYCHOTHERAPY	340
		IX.
	REFERENCES	368
	INDEX	383

### CHAPTER I GENERAL INTRODUCTION

#### A DEFINITION OF PSYCHOPATHOLOGY

There is no better definition of psychopathology for our purpose than that given by Bernard Hart (1929, p. 2). This reads: 'Psychopathology connotes, not a mere description of mental symptoms, but an endeavour to *explain* disorder or certain disorders in terms of psychological processes.' By psychopathology is thus meant that part of psychology which has a bearing upon the disorders of behaviour and of mental activity, an exposition of psychopathology being no more than an exposition of a certain part of psychology and its applications.

Psychopathology is psychology applied to a certain range of problems. Just as it may be applied to military, industrial, educational and other practical problems, so psychology may be applied to clinical problems, and this customarily is the field served by psychopathology. But the distinctions between the fields of application are arbitrary, and the fields overlap. Thus some of the problems that will be discussed in this book are as much educational as clinical, and some of the problems met in the industrial applications of psychology, e.g. the personal factors in the causation of accidents, may be considered to fall within the field of psychopathology.

### THE RELATION OF PSYCHOPATHOLOGY TO PSYCHOLOGY

Whereas psychology is concerned especially with the typical and normal reactions of living organisms to changes in their environment, and with the mechanisms by which organisms adapt to these changes, psychopathology deals with deviations from the typical and normal, and with the reasons for failure to adapt successfully. This difference is largely one of emphasis, the distinction between psychology and psychopathology being arbitrary and mainly one of convenience.

A definite distinction between normal and disordered behaviour is neither possible nor desirable. Indeed, for the purposes of psychopathological explanation, the disorders observed in the mental illnesses are assumed to be but special examples of normal activity and the regular consequences of the external circumstances, past as well as present, in which they occur. And they have to be explained by the extension of the theories pertaining to normal behaviour. The reasons why some individuals, and not others, show abnormalities or disorders in their reactions are thus assumed to lie in their environments and not in their inherent properties. It is assumed that their capacities for adaptation are normal, and also that their central nervous systems are intact and capable of functioning normally, and that their physiology and biochemistry are essentially normal.

These assumptions are controversial, and many readers will call them in question. Yet they are of crucial importance in this exposition of psychopathology, and it will be shown that the symptoms of a wide range of mental illnesses can be explained without resorting to any supposition that an inherent defect exists in the patients, which is not shared by healthy persons. Nevertheless, the occurrence of disorder, when the environment has been abnormal, is the result of limitations in human powers of adaptation. These points are taken up again below (p. 236 especially).

Psychopathology is dependent on psychology and draws from psychology the principles by which to explain the diverse and unsystematic observations made during the investigation, treatment and follow-up of patients. These principles, established and proved in the laboratory, are applied in the clinic. In turn, the observations made in the clinic suggest new hypotheses for experimental testing in the laboratory.

### RELATION OF PSYCHOPATHOLOGY TO OTHER BRANCHES OF KNOWLEDGE

Psychology and psychopathology are branches of biology-Psychiatry, on the other hand, is a branch of medical practice, and its purpose is the taking of remedial measures, for it is concerned with the care and treatment of the mentally ill. Some of the methods of psychiatry are empirical. Others consist in the application to treatment, of principles drawn not only from psychology and psychopathology but also from physiology, biochemistry and several other branches of science. Psychology and psychopathology bear a somewhat similar relation to psychiatry as do physiology and pathology respectively to the medicine of organic disease. Psychology, however, has hitherto found fewer applications in psychiatry than has physiology in medicine, for, whereas physiology, pathology and medicine have been elaborated in close connexion with each other for several hundreds of years, the roots of modern psychology, and hence, although to a lesser degree, of modern psychopathology, lie in fields which have had little contact with medicine, from which psychiatry has largely sprung. For these reasons the applications of psychology in psychiatry meet formidable difficulties, which

psychopathologists are now tackling energetically.

Psychotherapy. The term 'psychotherapy' is used loosely and with various meanings. Usually it refers to the application of psychopathological theories in treatment and, in particular, to the interview methods of education and re-education. There are of course other methods of treating mental illnesses, which are not specifically psychotherapeutic, such as medication with drugs or hormones, or social measures like rehousing or admission to an institution, or 'physical' methods like electroplexy, insulin coma and leucotomy. The function of psychopathology is explanation and not treatment, but no psychopathologist can detach himself from the problems of treatment, and it is in psychotherapy that psychopathological theories find their most important applications, as will be shown in Chapter XIV.

Psychoanalysis. The term 'psychoanalysis' refers sometimes to the method of investigation and treatment, based upon the method of 'free association', which was elaborated by Freud and his followers, and sometimes to the controversial theories which purport to explain the data obtained in this way. In the former sense it means a specialized form of psychotherapy; in the latter sense it provides psychopathology with specialized theories. Strictly speaking, only the original method of the Freudian school should be called psychoanalysis, but this term is also used to refer to derivatives of the Freudian method, even when these rely upon the revival of past experience to a small degree only or have discarded certain other principles which distinguish the Freudian method from other forms of psychotherapy. The main contributions of psychoanalysis to modern psychopathology are discussed in Chapter II and

elsewhere, psychoanalytic methods of treatment in Chapter XIV.

Neurology. Neurology is concerned with the disorders of behaviour and mental activity which arise from defects in the structure and function of the central nervous system, and its purpose is to relate such disorders to the site, extent and character of the defects and so to discover the functions of the different parts of the central nervous system. This purpose is different from, but complementary to, that of psychopathology. Both a neurological explanation and a psychopathological explanation may be necessary to account completely for the symptoms shown by a given patient, the former relating the symptoms to defects in the structure or function of the brain, and the latter to external circumstances and past experience, and in the practice of psychiatry the psychopathological examination of the patient is usually supplemented by a neurological examination and occasionally by special investigations, e.g. of the electrical activity of the brain by means of the electro-encephalogram.

### OTHER EXPLANATIONS OF MENTAL DISORDERS

Psychopathology is concerned with the aetiological factors in mental disorders which lie in the psychological environment. But there are other possible explanations of disorders. Thus disorders may be attributed to constitutional factors. These may either be inherited, and reside in the genes with which the patient has been endowed by his parents, or be acquired, and represent the effects of physical agents which have acted on him. Some authorities contend that the practical importance of the constitutional factors is much greater than that of the psychological factors. Those readers who share this view may complain that this book is strongly biased and makes far too much of the psychological factors. They should bear in mind that the purpose of the book is to argue the case in favour of psychopathological theories, without intending any disrespect for alternative theories. This being the purpose, it is legitimate to examine critically the theories which deal with the physical and genetical factors in aetiology, as is done in Chapters III and V, with the aim of showing up the place which they leave open for psychopathological theories.

### SOURCES OF EVIDENCE

Many of the most important hypotheses of contemporary psychopathology rest upon data obtained in the course of the investigation and treatment of individual patients. Some of these data consist of observations made of the behaviour of patients in more or less standardized situations, others of the reports of patients upon their feelings and thoughts; and others, consisting of the reports of patients themselves and of their relatives and friends, comprise the patients' histories. The psychopathologist reduces all these diverse data to order in such a way as to define, firstly, the patients' reactions and attitudes towards the contemporaneous environment, secondly, the mechanisms underlying these reactions, and, thirdly, the origins of the reactions and attitudes in their past experience of the environment.

These data are clinical and not experimental, in any strict sense, and they are relatively unsystematic. But their value as evidence should not be under-estimated, for those who take responsibility for the management and treatment of patients are obliged to submit their conclusions to the critical scrutiny of their medical, nursing and other colleagues as well as of their patients and the patients' relatives. Moreover, deductions made from the examination and history of patients are repeatedly tested by predicting and then observing reactions to various forms of stimulation, or change in circumstances, and the outcome of remedial measures. Also, the views that are held on a case are continually modified and refined as further information is obtained. Thus the discipline of clinical work is an exacting one, which does much to ensure that the views held about patients are reasonable.

Nevertheless, clinical data by themselves are an insufficient basis for a scientific theory, although they may suggest fruitful hypotheses, and wide differences in opinion on many of the major issues in psychopathology exist between those who rely on clinical data alone. The viewpoint decides to what features of the clinical picture attention is paid, and hence the order into which the clinical data are brought and the interpretations which they are given.

Many of the difficulties which at present beset psychopathologists arise from the fact that the descriptions, prevailing in

British psychiatry, of the signs and symptoms of mental disorders are swayed by an emphasis upon the somatic symptoms and the constitutional factors in aetiology. This emphasis reflects the viewpoints of research in fields other than that of psychopathology, for psychological and psychopathological techniques are especially suited to the study of behaviour and environmental factors. A first task for psychopathologists, therefore, is to revise the descriptions and to put them into a form which meets the requirements of contemporary psychological theories. Accordingly, many of the descriptions of symptoms that will be given in later chapters are expressed in terms differing from those found in those textbooks of psychiatry which labour constitutional theories (e.g. Mayer-Gross, Slater and Roth, 1954).

All research in psychopathology starts from hypotheses based upon clinical data, but often methods which are not clinical are employed for the proof of the hypotheses. Two types of proof, in particular, have been gaining steadily in importance during recent years, and these will receive a great deal of attention in this book. The first type depends upon correlation methods, and the second upon experimentation.

#### CORRELATION METHODS

The first type of proof depends upon the fact that any given form of disorder is shown by a proportion only, usually a minority, of any social group, the majority being unaffected. Many researches consist therefore in attempts to discover what factors have been, or are, present in the minority and not in the majority and then to demonstrate correlations between the occurrence of the disorder and the presence of the factor. Statistical methods, which are usually simple ones, are required for this purpose. Thus attempts to demonstrate correlations between the occurrence of various forms of disorder and physical factors (Chapter III), general social factors (Chapter IV) and factors in the family environment (Chapters VI to IX) will be discussed at some length. Genetical theories, too (Chapter V), rely mainly on evidence of correlations in the occurrence of disorders in individuals of different degrees of blood relationship.

The correlations that have been demonstrated so far are of

a relatively low order. That this is so reflects the unsatisfactoriness of current definitions of the disorders and of the factors with which the occurrence of the disorders has been correlated. Moreover, there may be serious difficulties in deciding reliably whether and in what degree a given disorder and a given factor are present. Closer correlations will be demonstrable when the variables have been defined more satisfactorily, and when methods have been improved. There is a very long way to go, however, before correlations which approach completeness can be expected. All statements in psychopathology are qualified therefore by a rough assessment of the degree of correlation. This assessment can rarely be expressed more precisely than thus: such-and-such a disorder 'may be', 'tends to be', 'is usually' or 'is often' correlated with such-and-such a factor.

In general, correlation studies have been concerned with factors which are held on clinical grounds to play a part in the aetiology of the disorders, in the sense that, had the factors not been present, or were they removed, the disorders would not have appeared or would be relieved. But, even when a significant degree of correlation has been demonstrated, it does not follow necessarily that the factor causes the disorder. This step in explanation can only be taken if the disorder is produced experimentally under the predicted conditions.

### EXPERIMENTAL METHODS

The second type of proof of clinical hypotheses consists, therefore, in attempts to produce disorders experimentally. The possibilities of producing replicas of the naturally occurring disorders experimentally are limited, and in most instances it would not be permissible to do so in human subjects, even if it were practicable. However, circumscribed or modified forms of disorders or single symptoms may be produced. Also, hypotheses attributing a given disorder to a given factor may sometimes be proved experimentally by showing that a similar factor produces a similar disorder in animals. Several examples will be given below of researches in which disorders akin to human illnesses have been produced in animals (Chapters X and XI); also several experimental studies on human subjects will be discussed (Chapter XI especially).

Doubts have been thrown on the validity of experimental proofs of this kind, for it has been argued that the experimental disorders are no more than superficially similar analogues of the naturally occurring disorders. They are likely to become less serious when the hypotheses to be proved can be stated in more precise terms than is yet possible, and when the experiments are designed more carefully. But, even if the shortcomings of the researches carried out so far are overcome, the weakness will still remain that the experimental disorders are produced in external conditions which are highly simplified by comparison with those supposed to be responsible for the naturally occurring disorders. That this is so does not necessarily invalidate the proofs, but it means that experimental researches are more useful in elucidating the mechanisms of the naturally occurring disorders than in defining their causal factors in detail.

The standards of proof aimed at in psychopathology are not lower than those which prevail in the pathology of organic disease. Thus in pathology a physical agent, e.g. a microorganism, is provisionally accepted as the cause of a given disorder if it is found to be present in a significant proportion of cases. The suspected agent is virtually never given to human subjects—there are one or two exceptions to this rule—but, having been isolated by culture, the micro-organism is injected into a suitable animal, e.g. a guinea-pig, in order to discover whether it produces effects similar to those which constitute the human disorder. If it does, a method of treatment of the animal disorder is worked out, and the proof is confirmed if this method is found to be successful, in controlled clinical trials, in the treatment of the human disorder. Procedure in psychopathology follows along similar lines.

### THE AETIOLOGICAL FACTORS IN THE PSYCHOLOGICAL ENVIRONMENT

The questions posed by psychopathologists take two forms. Under what conditions in the psychological environment does a given disorder occur? How do external conditions of a certain kind give rise to disorder? The answer to the first question consists in the definition of the external conditions, immediate and antecedent, in which the disorder arises, and the answer

to the second, in the description of the mechanisms through which the disorder comes about.

Psychopathologists try to correlate the occurrence of disorders with external conditions. In doing so, they treat the external conditions as 'independent' variables, and the disorders as 'dependent' variables, and regard disorders as reactions to external conditions. Although it facilitates exposition in psychopathology, this formula, which is the customary one in psychology, is highly simplified and fails to take account of the special character of the environments to which mental disorders are reactions. They are not inert environments. On the contrary, many of the factors responsible for mental disorders have to do with the patients' relationships with other persons.

Interactions between individuals. Psychopathologists lay special stress on the relationships which patients make during child-hood with their mothers and fathers and other members of their families, and suppose that habits then acquired reappear in a more or less modified form in relationships with other persons at later stages in life. Mental disorders, they suppose, represent the failure of these habits to meet the demands arising out of personal relationships. But every personal relationship consists in an interaction between two persons. The behaviour of other persons towards a patient is not truly independent of the patient's reactions to them. Nevertheless, it is necessary for purposes of exposition to treat it as independent, at least in the first instance. In later chapters we shall discuss the attitudes of parents towards their children, therefore, as if these attitudes were independent variables.

Predisposing and precipitating conditions. A distinction is usually made between those conditions which exist immediately prior to the onset of the disorder and those conditions which belong to the patient's past experience. The former are described as immediate or precipitating, and the latter, as antecedent or predisposing. The distinction is arbitrary, but convenient, for the precipitating conditions are but the last of a series of influences which in the end bring about the changes in the patient's behaviour which constitute the disorder. Looked at from a different point of view, the predisposing conditions produce changes in the patient which determine how he reacts to the precipitating conditions. Again, in other terms, the

significance to the patient of the later conditions is the result of his previous experience of similar or related conditions, and his reaction to the later conditions depends upon the predispositions, habits and response tendencies which earlier conditions have established.

### JUSTIFICATION OF AN ENVIRONMENTAL THEORY

Some authorities have denied that the principal forms of mental disorder are reactive at all to external events. Kraepelin, for instance, concluded that attacks of mania and depression are 'in general independent of external influence', and that schizophrenia (dementia precox) is an 'endogenous' psychosis. A similar view is still heard occasionally, and there are some authorities who still make a distinction between what they call 'endogenous' and 'reactive' psychoses. Others discount the external causes of, for instance, depression, because even the most diligent search reveals only factors which appear to them to be commonplace and trivial by comparison with the effects to be attributed to them. This failure to find in the environment. factors of sufficient weight to explain disorders has been due, at least in part, to not knowing what kind of factor to look for, and to not realizing that a factor's significance may be far greater than is suggested by its face value. Certainly, the factors which arise out of personal relationships are often difficult to detect and evaluate. They are none the less important on this account. They are readily accepted, or proffered, by members of the general public as causes of mental illness, but their importance has been minimized, and wrongly so, by some of the influential schools of psychiatry.

Because the external causes have not hitherto been identified with any certainty or defined precisely, theories attaching major importance to endogenous and constitutional factors have continued to receive support in some quarters. To draw an analogy, one who is ignorant of the germ theory of disease might attribute tuberculous cavitation of the lungs to an endogenous degeneration. Until the first successful inoculation of the disease, tuberculosis was in fact attributed, for instance in 1819 by Laennec, the inventor of the stethoscope, merely to an inherited constitutional defect which had become manifest, whereas it is now